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JVC LT-20DA6SK SERVICE MANUAL

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JVC

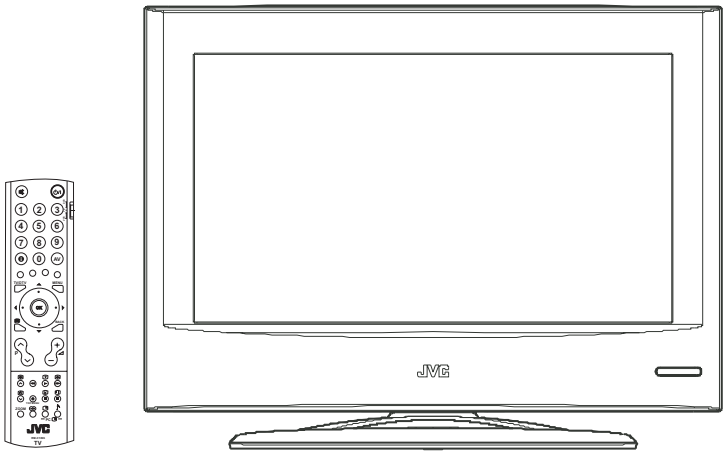
SERVICE MANUAL

WIDE LCD PANEL TELEVISION

LT-20DA6SK

InteriArt

DVB Digital Video Broadcasting



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No.YA354
2005/11

SPECIFICATION

Items		Contents
Dimensions (W × H × D)		53.7cm × 41.1cm × 21.4cm [Included stand] 53.7cm × 37.7cm × 9.7cm [TV only]
Mass		6.5kg [Included stand] 5.5kg [TV only]
Power Input	ADAPTOR TV	AC100 ~ 240V 50Hz DC24V
Power Consumption		80W (Standby: 3.0W)
TV RF System	Analog Digital	CCIR (I) DVB-T
Colour System		PAL / NTSC 3.58/4.43 [EXT only]
Stereo System		NICAM (I)
Receiving Frequency	Analog Digital	UHF: 470 MHz - 862 MHz UHF: 474 MHz - 850 MHz
Intermediate Frequency	VIF SIF	38.9 MHz (I) 32.9 MHz (6.0 MHz :I)
Colour Sub Carrier Frequency	PAL NTSC	4.43 MHz 3.58 MHz / 4.43 MHz
Teletext System	Analog Digital	FLOF (Fastext level 2.5), WST(World Standard system) MHEG 5 UK profile
LCD panel		20V-inch wide aspect (15:9)
Screen Size		Diagonal : 50.9cm (H: 44.3cm × V : 24.9cm)
Display Pixels		Horizontal : 1366 dots × Vertical : 768 dots (W-XGA)
Audio Power Output		5W + 5W(10% THD)
Speaker		3cm × 10cm (×2)
Aerial terminal (VHF/UHF)		F-type connector, 75Ω unbalanced, coaxial
EXT-1 / EXT-2 (Input / Output)		21-pin Euro connector (SCART socket) × 2
EXT-3 (Input)	Component Audio	Y:1V(p-p) Positive (Negative sync provided), 75Ω RCA pin jack × 1 Pb / Pr : 0.7V(p-p), 75Ω RCA pin jack × 2 500mV (rms), Low impedance, RCA pin jack × 2
EXT-4 (Input)	S-Video Video Audio	Mini-DIN 4 pin × 1 Y: 1V (p-p), Positive (Negative sync provided), 75 Ω C: 0.286V (p-p) (Burst signal), 75 Ω 1V (p-p), Positive (Negative sync provided), 75 Ω, RCA pin jack × 1 500mV (rms), High impedance, RCA pin jack × 2
PC (RGB) Input		D-sub 15pin × 1 R/G/B : 0.7V (p-p), 75Ω HD / VD : 1V (p-p) to 5V (p-p), high impedance < Available signal > VGA : 640 pixels × 480 pixels (Horizontal : 31.5kHz / Vertical : 60Hz) XGA : 1024 pixels × 768 pixels (Horizontal : 48.4kHz / Vertical : 60Hz)
PC AUDIO input		3.5mm stereo mini jack × 1
Audio output		500mV (rms), Low impedance, RCA pin jack × 2
Sub Woofer out		500mV (rms), Low impedance, RCA pin jack × 1
Headphone		3.5mm stereo mini jack × 1
Remote Control Unit		RM-C1895 (AA/R6 dry cell battery × 2)

Design & specifications are subject to change without notice.

SECTION 1
PRECAUTION

1.1 SAFETY PRECAUTIONS

(1) The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

(2) Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

(3) Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessary be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may cause shock, fire, or other hazards.

(4) The leads in the products are routed and dressed with ties, clamps, tubing's, barriers and the like to be separated from live parts, high temperature parts, moving parts and / or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

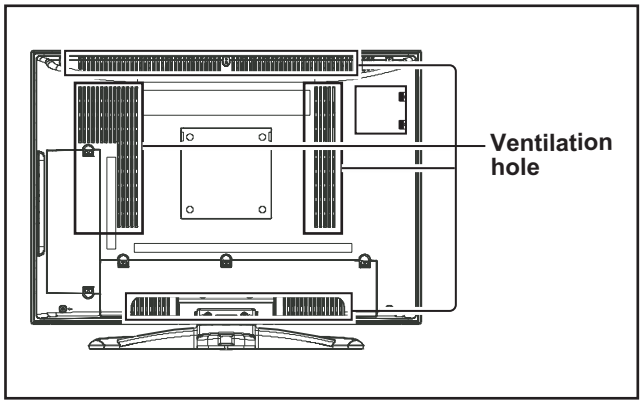
WARNING

(1) The equipment has been designed and manufactured to meet international safety standards.
(2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
(3) Repairs must be made in accordance with the relevant safety standards.
(4) It is essential that safety critical components are replaced by approved parts.
(5) If mains voltage selector is provided, check setting for local voltage.

1.2 INSTALLATION

1.2.1 HEAT DISSIPATION

If the heat dissipation vent behind this unit is blocked, cooling efficiency may deteriorate and temperature inside the unit will rise. The temperature sensor that protects the unit will be activated when internal temperature exceeds the pre-determined level and power will be turned off automatically.Therefore, please make sure pay attention not to block the heat dissipation vent as well as the ventilation outlet behind the unit and ensure that there is room for ventilation around it.



1.2.2 INSTALLATION REQUIREMENTS

Ensure that the minimal distance is maintained, as specified below, between the unit with and the surrounding walls, as well as the floor etc.Install the unit on stable flooring or stands.Take precautionary measures to prevent the unit from tipping in order to protect against accidents and earthquakes.

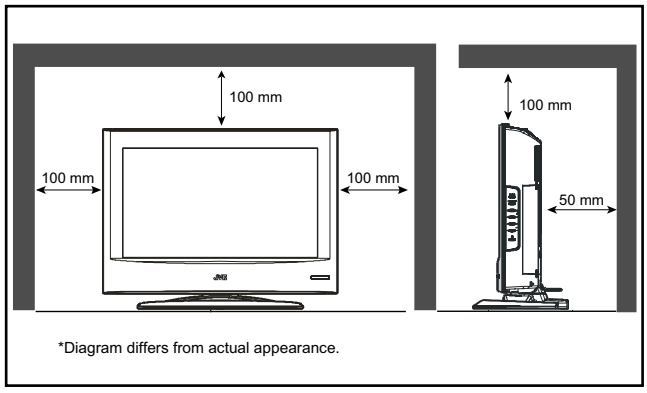


*Diagram differs from actual appearance.

1.2.3 NOTES ON HANDLING

(1) WHEN TAKING UNIT OUT OF A PACKING CASE
When taking the unit out of a packing case, do not grasp the upper part of the unit. If you take the unit out while grasping the upper part, the LCD PANEL may be damaged because of a pressure. Instead of grasping the upper part, put your hands on the lower backside or sides of the unit.

(2) AS FOR PRESSING OR TOUCHING A SPEAKER
Be careful not to press the opening of the speaker in the lower part of the unit and around them since the decorative sheet on the surface of the openings may be deformed.

1.3 HANDLING LCD PANEL

1.3.1 PRECAUTIONS FOR TRANSPORTATION

When transporting the unit, pressure exerted on the internal LCD panel due to improper handling (such as tossing and dropping) may cause damages even when the unit is carefully packed. To prevent accidents from occurring during transportation, pay careful attention before delivery, such as through explaining the handling instructions to transporters.

Ensure that the following requirements are met during transportation, as the LCD panel of this unit is made of glass and therefore fragile:

(1) USE A SPECIAL PACKING CASE FOR THE LCD PANEL
When transporting the LCD panel of the unit, use a special packing case (packing materials). A special packing case is used when a LCD panel is supplied as a service spare part.

(2) ATTACH PROTECTION SHEET TO THE FRONT
Since the front (display part) of the panel is vulnerable, attach the protection sheet to the front of the LCD panel before transportation. Protection sheet is used when a LCD panel is supplied as a service spare part.

(3) AVOID VIBRATIONS AND IMPACTS
The unit may be broken if it is toppled sideways even when properly packed. Continuous vibration may shift the gap of the panel, and the unit may not be able to display images properly. Ensure that the unit is carried by at least 2 persons and pay careful attention not to exert any vibration or impact on it.

(4) DO NOT PLACE EQUIPMENT HORIZONTALLY
Ensure that it is placed upright and not horizontally during transportation and storage as the LCD panel is very vulnerable to lateral impacts and may break. During transportation, ensure that the unit is loaded along the traveling direction of the vehicle, and avoid stacking them on one another. For storage, ensure that they are stacked in 2 layers or less even when placed upright.

1.3.2 OPTICAL FILTER (ON THE FRONT OF THE LCD PANEL)

(1) Avoid placing the unit under direct sunlight over a prolonged period of time. This may cause the optical filter to deteriorate in quality and COLOUR.

(2) Clean the filter surface by wiping it softly and lightly with a soft and lightly fuzz cloth (such as outing flannel).

(3) Do not use solvents such as benzene or thinner to wipe the filter surface. This may cause the filter to deteriorate in quality or the coating on the surface to come off. When cleaning the filter, usually use the neutral detergent diluted with water. When cleaning the dirty filter, use water-diluted ethanol.

(4) Since the filter surface is fragile, do not scratch or hit it with hard materials. Be careful enough not to touch the front surface, especially when taking the unit out of the packing case or during transportation.

1.3.3 PRECAUTIONS FOR REPLACEMENT OF EXTERIOR PARTS

Take note of the following when replacing exterior parts (REAR COVER, FRONT PANEL, etc.):

(1) Do not exert pressure on the front of the LCD panel (filter surface). It may cause irregular COLOUR.

(2) Pay careful attention not to scratch or stain the front of the LCD panel (filter surface) with hands.

(3) When replacing exterior parts, the front (LCD panel) should be placed facing downward. Place a mat, etc. underneath to avoid causing scratches to the front (filter surface).

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

2.1 FEATURES

T-V LINK

When you have a T-V LINK compatible VCR connected to the EXT-2 Terminal on the TV,it is easier to set up the VCR and to view videos.

ZOOM

This function can change the screen size according to the picture aspect ratio.

OFF TIMER

This function can set the TV to automatically turn off after a set time.

COLOUR SYSTEM

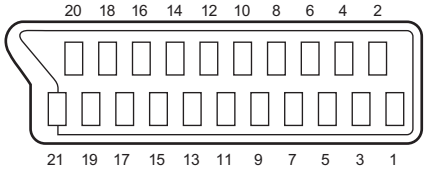
If the picture is not clear or no colour appears, change the current colour system to another colour system.

2.2 21-PIN EURO CONNECTOR (SCART) : EXT-1 / EXT-2

Pin No.	Signal designation	Matching value	EXT-1	EXT-2
1	AUDIO R output	500mV(rms) (Nominal),, Low impedance	Used (TV OUT)	Used (LINE OUT)
2	AUDIO R input	500mV(rms) (Nominal),, High impedance	Used (R1)	Used (R2)
3	AUDIO L output	500mV(rms) (Nominal),, Low impedance	Used (TV OUT)	Used (LINE OUT)
4	AUDIO GND		Used	Used
5	GND (B)		Used	Used
6	AUDIO L input	500mV(rms) (Nominal),, High impedance	Used (L1)	Used (L2)
7	B input	$700mV_{(B-W)}$, 75Ω	Used	Used
8	FUNCTION SW (SLOW SW)	Low : 0V-3V High : 8V-12V, High impedance	Used	Used
9	GND (G)		Used	Used
10	SCL / T-V LINK		Not used	Used (SCL2 / TV-LINK)
11	G input	$700mV_{(B-W)}$, 75Ω	Used	Used
12	SDA		Not used	Used (SDA2)
13	GND (R)		Used	Used
14	GND (YS)		Used	Not used
15	R / C input	R : $700mV_{(B-W)}$, 75Ω C : $300mV_{(P-P)}$, 75Ω	Used (R)	Used (C2/R)
16	Ys input (FAST SW)	Low : 0V-0.4V, High : 1V-3V, 75Ω	Used	Used
17	GND (VIDEO output)		Used	Used
18	GND (VIDEO input)		Used	Used
19	VIDEO output	$1V_{(P-P)}$ (Negative sync), 75Ω	Used (TV OUT)	Used (LINE OUT)
20	VIDEO / Y input	$1V_{(P-P)}$ (Negative sync), 75Ω	Used	Used
21	COMMON GND		Used	Used

(P-P= Peak to Peak, B-W= Blanking to white peak)

[Pin assignment]



2.3 TECHNICAL INFORMATION

2.3.1 LCD PANEL

This unit uses the flat type panel LCD (Liquid Crystal Display) panel that occupies as little space as possible, instead of the conventional CRT (Cathode Ray Tube), as a display unit.
Since the unit has the two polarizing filter that are at right angles to each other, the unit adopts "normally black" mode, where light does not pass through the polarizing filter and the screen is black when no voltage is applied to the liquid crystals.

2.3.1.1 SPECIFICATIONS

The following table shows the specifications of this unit.

Item	Specifications	Remarks
Displayed colour	16777216 colours	256 colours for R, G, and B
Brightness	450cd/m^2	
Contrast ratio	400: 1	
Response time	25ms	
View angle	Horizontally: 176°, Vertically: 176°	

2.3.1.2 PIXEL FAULT

There are three pixel faults - bright fault , dark fault and flicker fault - that are respectively defined as follows.

■ **BRIGHT FAULT**

In this pixel fault, a cell that should not light originally is lighting on and off.
For checking this pixel fault, input ALL BLACK SCREEN and find out the cell that is lighting on and off.

■ **DARK FAULT**

In this pixel fault, a cell that should light originally is not lighting or lighting with the brightness twice as brighter as originally lighting.
For checking this pixel fault, input 100% of each R/G/B colour and find out the cell that is not lighting.

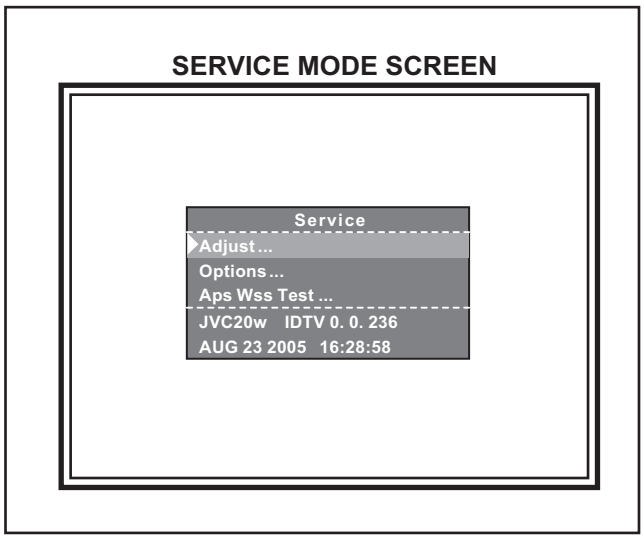
■ **FLICKER FAULT**

In the pixel fault, a cell that should light originally or not light originally is flashing on and off.
For checking this pixel fault, input ALL BLACK SCREEN signal or 100% of each RGB colour and find out the cell that is flashing on and off.

2.4 BASIC OPERATION OF SERVICE MODE

2.4.1 HOW TO ENTER THE SERVICE MODE

(1) Press **[INFORMATION]** key and **[MUTING]** key on the remote control unit simultaneously to enter the SERVICE MODE SCREEN.



2.4.2 HOW TO EXIT THE SERVICE MODE

Press the **[MENU]** key to exit the Service mode.

2.4.3 CHANGE AND MEMORY OF SETTING VALUE

■ **SELECTION OF SETTING MENU & ITEM**

- **[FUNCTION ▲/▼]** key : Select the SETTING MENU & ITEM
- **[OK]** key : Decision the SETTING MENU & ITEM

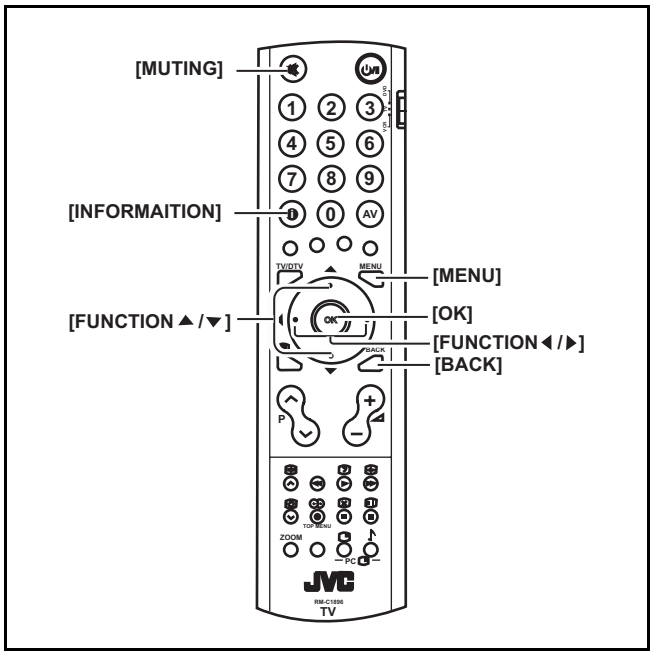
■ **CHANGE OF SETTING VALUE (DATA)**

- **[FUNCTION ◀ / ▶]** key.

■ **MEMORY OF SETTING VALUE (DATA)**

The setting value will be stored automatically when release the REMOTE CONTROL UNIT keys

2.4.4 SERVICE MODE SELECT KEY LOCATION



2.4.5 SERVICE MODE SETTING ITEMS

Setting menu	Setting items	Contents
Adjust	Group	----
	Mode	----
	Col. Temp.	----
	Contrast	----
	Brightness	----
	Colour	----
	Sharpness	----
	Red	----
	Green	----
	Blue	----
	Aps Volume	----
Option 1	First APS	If ON, TV starts with APS menu at Start-up
	FM Prs Avl On	Adjusts the FM Prescaler value, when Automatic Volume Levelling is On
	Nicam Prs Avl On	Adjusts the Nicam Prescaler value, when Automatic Volume Levelling is On
	Scart Prs Avl On	Adjusts the Scart Volume value, when Automatic Volume Levelling is On
	Scart Volume Avl On	Adjusts the Scart Volume value, when Automatic Volume Levelling is On
	FM Prs Avl Off	Adjusts the FM Prescaler value, when Automatic Volume Levelling is Off
	Nicam Prs Avl Off	Adjusts the Nicam Prescaler value, when Automatic Volume Levelling is Off
	Scart Prs Avl Off	Adjusts the Scart Prescaler value, when Automatic Volume Levelling is Off
	Scart Volume Avl Off	Adjusts the Scart Volume value, when Automatic Volume Levelling is On
	Avl	Enable/disable Automatic Volume Levelling System
	Sound	----
Option 2	Carrier	----
	LDLY	----
	AGC	----
	Other MAD	----
Aps Wss Test	Programme	----
	VPS	----
	Pdc Format 1	----
	Pdc Format 2	----
	Name	----
	WSS	----

SECTION 3
DISASSEMBLY

3.1 DISASSEMBLY PROCEDURE

NOTE:

- Make sure that the power cord is disconnected from the outlet.
- Pay special attention not to break or damage the parts.
- When removing each board, remove the connectors as required.
- Taking notes of the connecting points (connector numbers) makes service procedure manageable.
- Make sure that there is no bent or stain on the connectors before inserting, and firmly insert the connectors.

3.1.1 REMOVING THE HINGE COVER

(1) Remove the 2 screws **[A]**.
(2) Remove the HINGE COVER.

3.1.2 REMOVING THE FOOT TOP COVER

- Remove the HINGE COVER.
  (1) Remove the 2 screws **[B]**.
  (2) Pull out the FOOT TOP COVER.

3.1.3 REMOVING THE FOOT ASSEMBLY

(1) Remove the 4 screws **[C]**.
(2) Remove the FOOT ASSEMBLY.

3.1.4 REMOVING THE THE HANDLE

- Remove the HINGE COVER.
- Remove the FOOT TOP COVER.
  (1) Remove the 4 screws **[D]**.
  (2) Remove the THE HANDLE.

3.1.5 REMOVING THE BACK COVER

- Remove the FOOT ASSEMBLY.
  (1) Remove the 5 screws **[E]**.
  (2) Remove the BACK COVER toward you.

NOTE:

If necessary, remove the HANDLE, SIDE AV COVER, CARD SLOT COVER and BACK DOOR.

3.1.6 REMOVING THE SIDE CONTROL PWB

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the 2 screws **[F]**.
  (2) Remove the BUTTON FUNCTION with SIDE CONTROL PWB.
  (3) Remove the 4 craws which is fixing the SIDE CONTROL PWB.
  (4) Remove the SIDE CONTROL PWB

3.1.7 REMOVING THE METAL HANG

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the 1 screw **[G]**.
  (2) Remove the METAL HANG.
  (3) Remove the opposite METAL HANG same steps.

3.1.8 REMOVING THE TERMINAL BOARD

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the 2 screws **[H]**.
  (2) Remove the TERMINAL BOARD.

3.1.9 REMOVING THE MAIN PWB

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
- Remove the TERMINAL BRACKET.
  (1) Remove the 7 screws **[J]**.
  (2) Remove the MAIN PWB.

3.1.10 REMOVING THE AV JACK BRACKET

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the 2 screws **[K]**.
  (2) Remove the AV JACK BRACKET.

3.1.11 REMOVING THE AV JACK PWB

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
- Remove the AV JACK BRACKET.
  (1) Remove the 2 screws **[L]**.
  (2) Remove the AV JACK PWB.

3.1.12 REMOVING THE LED PWB

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the 2 screws **[M]**.
  (2) Remove the LED PWB.

3.1.13 REMOVING THE SPEAKER

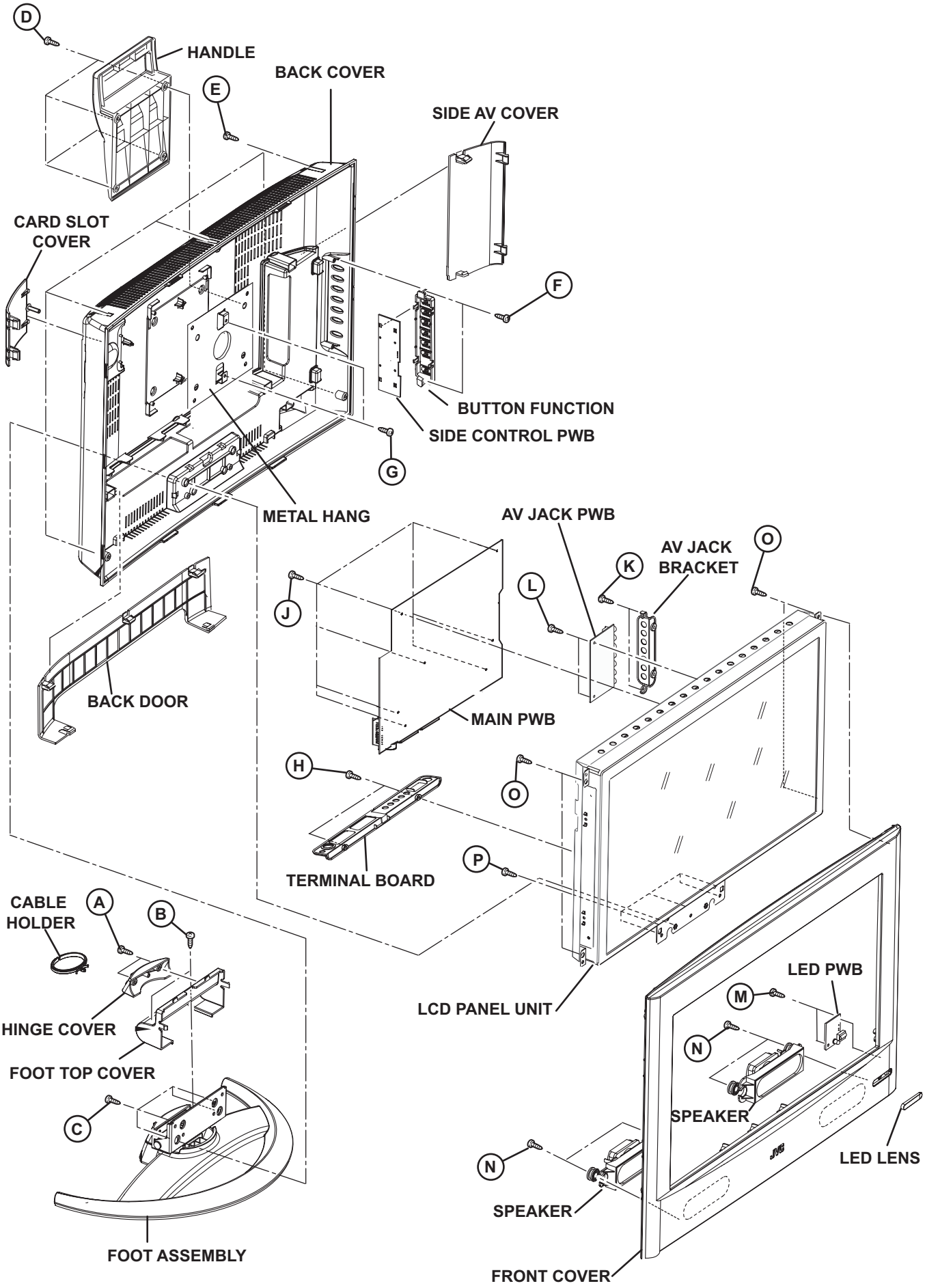
- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the speaker wire from speaker terminal.
  (2) Remove the 2 screws **[N]**.
  (3) Remove the SPEAKER PWB.
  (4) Remove the opposite speaker same steps.

3.1.14 REMOVING THE LCD PANEL UNIT

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
- Remove the MAIN PWB and AV JACK PWB.
  (1) Remove the 4 screws **[O]**.
  (2) Remove the 5 screw **[P]** fixing the DISPLAY SUPPORT and LCD PANEL UNIT.
  (3) Sightly raise the both sides of the LCD PANEL UNIT by hand from the FRONT COVER.

NOTE:

- Pay special attention not to break or damage on the FRONT PANEL.
- The LCD PANEL UNIT is fixed to the FRONT COVER (at the back side)by using double-side adhesive tapes. To remove the LCD PANEL UNIT, remove the adhesive tape on the FRONT COVER slowly.


D
HANDLE
BACK COVER
E
SIDE AV COVER
CARD SLOT COVER
F
BUTTON FUNCTION
SIDE CONTROL PWB
G
METAL HANG
AV JACK PWB
AV JACK BRACKET
K
O
L
J
BACK DOOR
MAIN PWB
H
O
TERMINAL BOARD
P
CABLE HOLDER
A
B
LED PWB
M
LCD PANEL UNIT
HINGE COVER
N
FOOT TOP COVER
SPEAKER
C
LED LENS
N
SPEAKER
FOOT ASSEMBLY
FRONT COVER

3.2 MEMORY IC REPLACEMENT

- This model uses the memory IC.
- This memory IC stores data for proper operation of the video and drive circuits.
- When replacing, be sure to use an IC containing this (initial value) data.

3.2.1 SETTINGS OF FACTORY SHIPMENT

3.2.1.1 BUTTON OPERATION

Setting item	Setting position
POWER	Off
TV/AV	TV

3.2.1.2 REMOTE CONTROL DIRECT OPERATION

Setting item	Setting position
ZOOM	AUTO

3.2.1.3 REMOTE CONTROL MENU OPERATION

(1) PICTURE

Setting item	Setting position
MODE	Bright
Contrast	33 Step
Bright-1	26 Step
Sharpness	11 Step
Colour	36 Step
Bright-2	7 Step
Colour Temp.	Cool
Nolse Red.	Min

(2) SOUND

Setting item	Setting position
Volume	10 Step
Bass	16 Step
Treble	15 Step
Balance	16 Step
Hyper Sound	Off
Sound Mode	Mono

(3) FEATURES

Setting item	Setting position
Sleep Timer	Off
Child Lock	Off
Language	English
EXT-2 Output	TV
Blue Back	Off

(4) Install [TV MODE]

Setting item	Setting position
Colour System	Auto
Decorder(EXT-2)	On
VCR	Off

(5) Install [EXT MODE]

Setting item	Setting position
Colour System	Auto
VCR	Off

3.3 REPLACEMENT OF CHIP COMPONENT

3.3.1 CAUTIONS

(1) Avoid heating for more than 3 seconds.
(2) Do not rub the electrodes and the resist parts of the pattern.
(3) When removing a chip part, melt the solder adequately.
(4) Do not reuse a chip part after removing it.

3.3.2 SOLDERING IRON

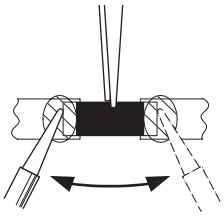
(1) Use a high insulation soldering iron with a thin pointed end of it.
(2) A 30w soldering iron is recommended for easily removing parts.

3.3.3 REPLACEMENT STEPS

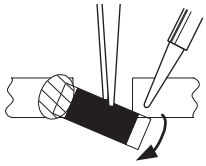
1. How to remove Chip parts

[Resistors, capacitors, etc.]

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



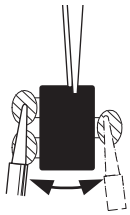
(2) Shift with the tweezers and remove the chip part.



[Transistors, diodes, variable resistors, etc.]

(1) Apply extra solder to each lead.

(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.



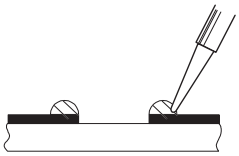
NOTE :

After removing the part, remove remaining solder from the pattern.

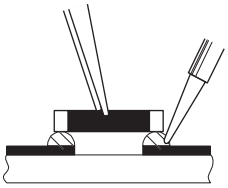
2. How to install Chip parts

[Resistors, capacitors, etc.]

(1) Apply solder to the pattern as indicated in the figure.

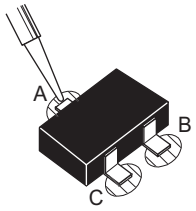


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

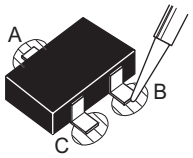


[Transistors, diodes, variable resistors, etc.]

(1) Apply solder to the pattern as indicated in the figure.
(2) Grasp the chip part with tweezers and place it on the solder.
(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



SECTION 4
ADJUSTMENT

This service manual does not describe ADJUSTMENT.

SECTION 5
TROUBLESHOOTING

This service manual does not describe TROUBLESHOOTING.

JVC

Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY DISPLAY CATEGORY 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama-city, Kanagawa-prefecture, 221-8528, Japan

(No.YA354)

Printed in Japan
VPT

JVC

SCHEMATIC DIAGRAMS

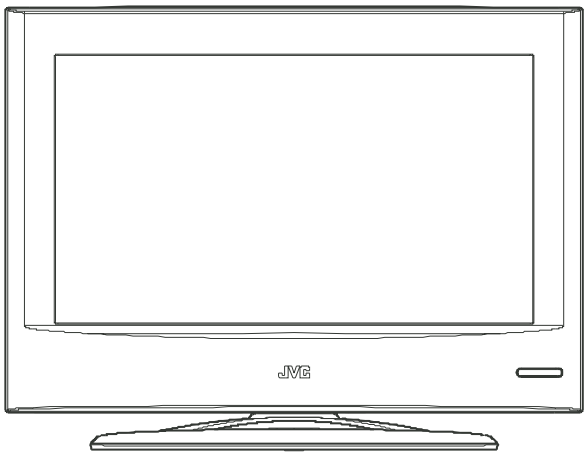
WIDE LCD PANEL TELEVISION

LT-20DA6SK

CD-ROM No.SML200511

InteriArt

DVB
Digital Video
Broadcasting



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No.YA354
2005/11

LT-20DA6SK

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety ciritical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	: Colour bar signal
(2)Setting positions of each knob/button and variable resistor	: Original setting position when shipped
(3)Internal resistance of tester	: DC 20kΩ/V
(4)Oscilloscope sweeping time	: H ⇒ 20μs / div
	: V ⇒ 5ms / div
	: Othters ⇒ Sweeping time is specified
(5)Voltage values	: All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

● In the PW board : R209 → R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

No unit	: [Ω]
K	: [kΩ]
M	: [MΩ]

● Rated allowable power

No indication	: 1/16 [W]
Others	: As specified

● Type

No indication	: Carbon resistor
OMR	: Oxide metal film resistor
MFR	: Metal film resistor
MPR	: Metal plate resistor
UNFR	: Uninflammable resistor
FR	: Fusible resistor

∗ Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

1 or higher	: [pF]
less than 1	: [μF]

● Withstand voltage

No indication	: DC50[V]
Others	: DC withstand voltage [V]
AC indicated	: AC withstand voltage [V]

∗ Electrolytic Capacitors

47/50[Example]: Capacitance value [μF]/withstand voltage[V]

● Type

No indication	: Ceramic capacitor
MM	: Metalized mylar capacitor
PP	: Polypropylene capacitor
MPP	: Metalized polypropylene capacitor
MF	: Metalized film capacitor
TF	: Thin film capacitor
BP	: Bipolar electrolytic capacitor
TAN	: Tantalum capacitor

(3)Coils

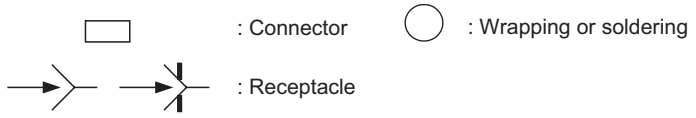
No unit	: [μH]
Others	: As specified

(4)Power Supply

∗ Respective voltage values are indicated

(5)Test point

(6)Connecting method



(7)Ground symbol

⊥ : LIVE side ground

: ISOLATED(NEUTRAL) side ground

: EARTH ground

: DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. if the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

◆ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

NOTE

◆ **Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.**
When ordering parts, please use the numbers that appear in the Parts List.

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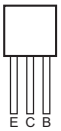
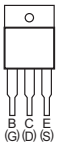
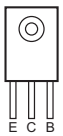
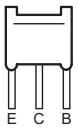
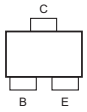
USING P.W. BOARD

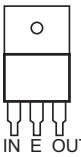
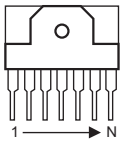
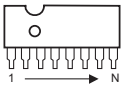
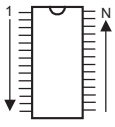
P.W.B ASS'Y name	LT-20DA6SK
MAIN P.W. BOARD	VE-20228287
SIDE CONTROL P.W. BOARD	VE-20224821
LED P.W. BOARD	VE-20220627
AV JACK P.W. BOARD	VE-20224823

SEMICONDUCTOR SHAPES

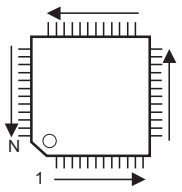
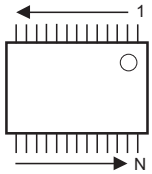
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

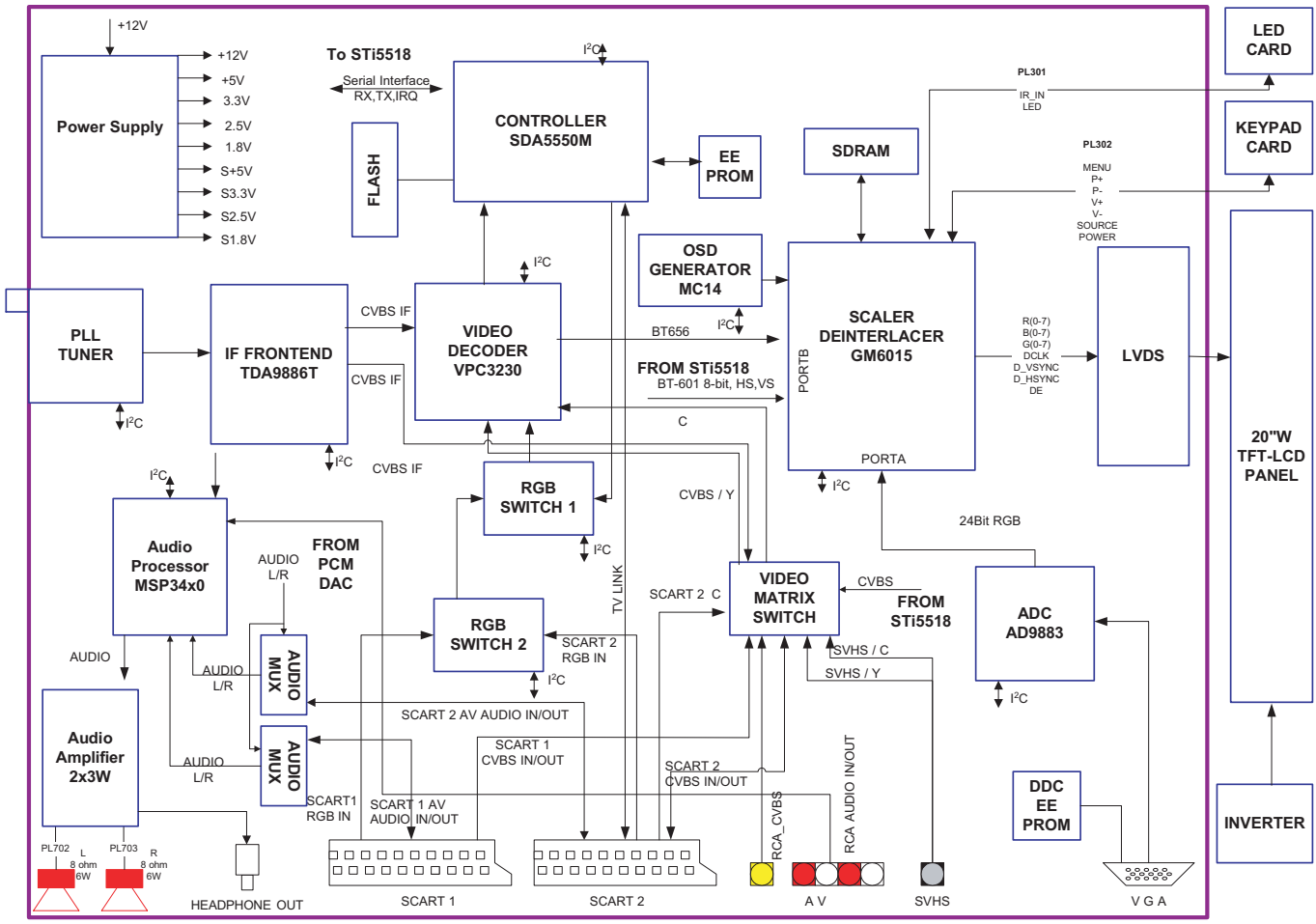
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

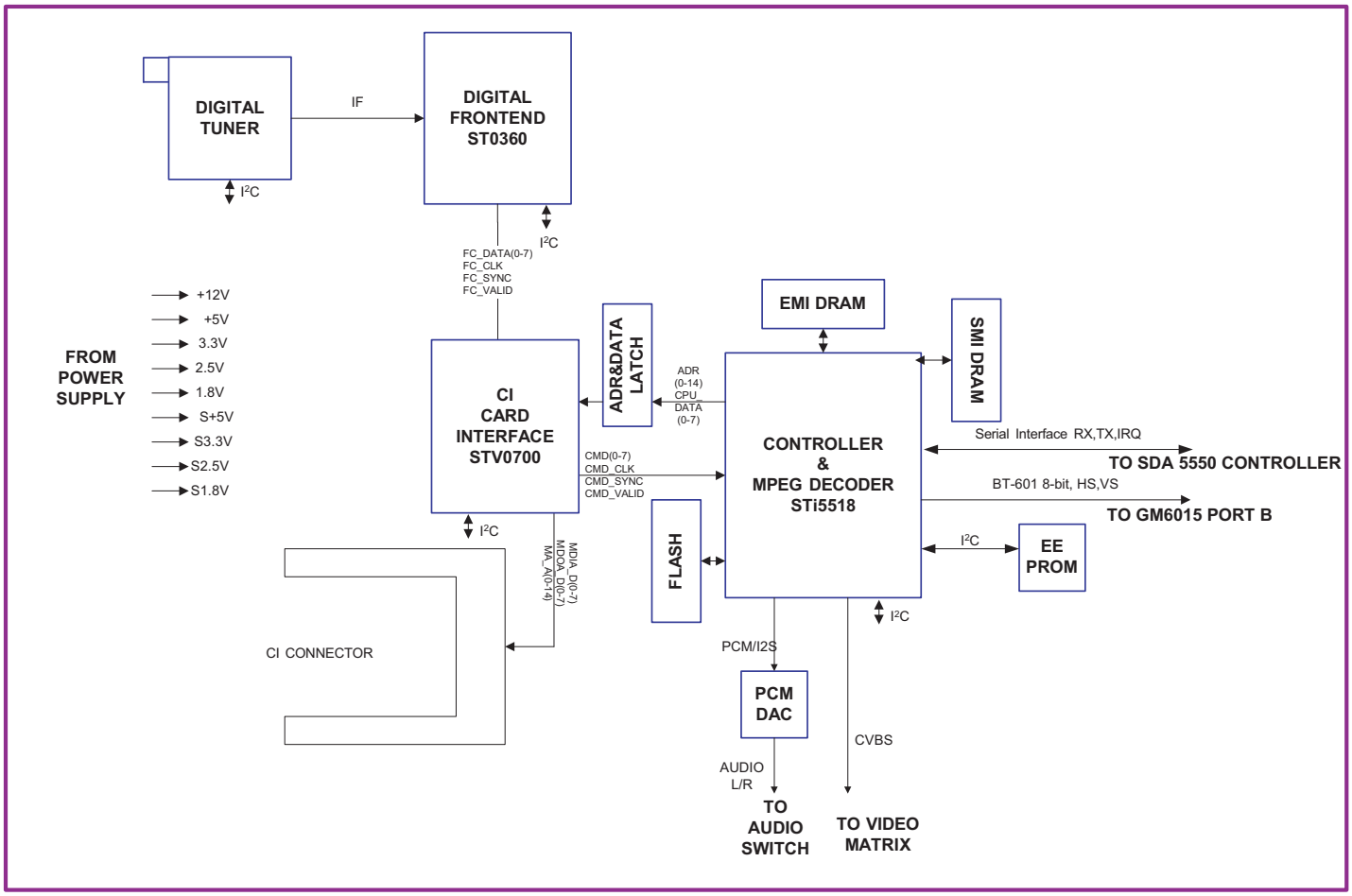
CHIP IC

TOP VIEW		
		

BLOCK DIAGRAM [TV PARTS]

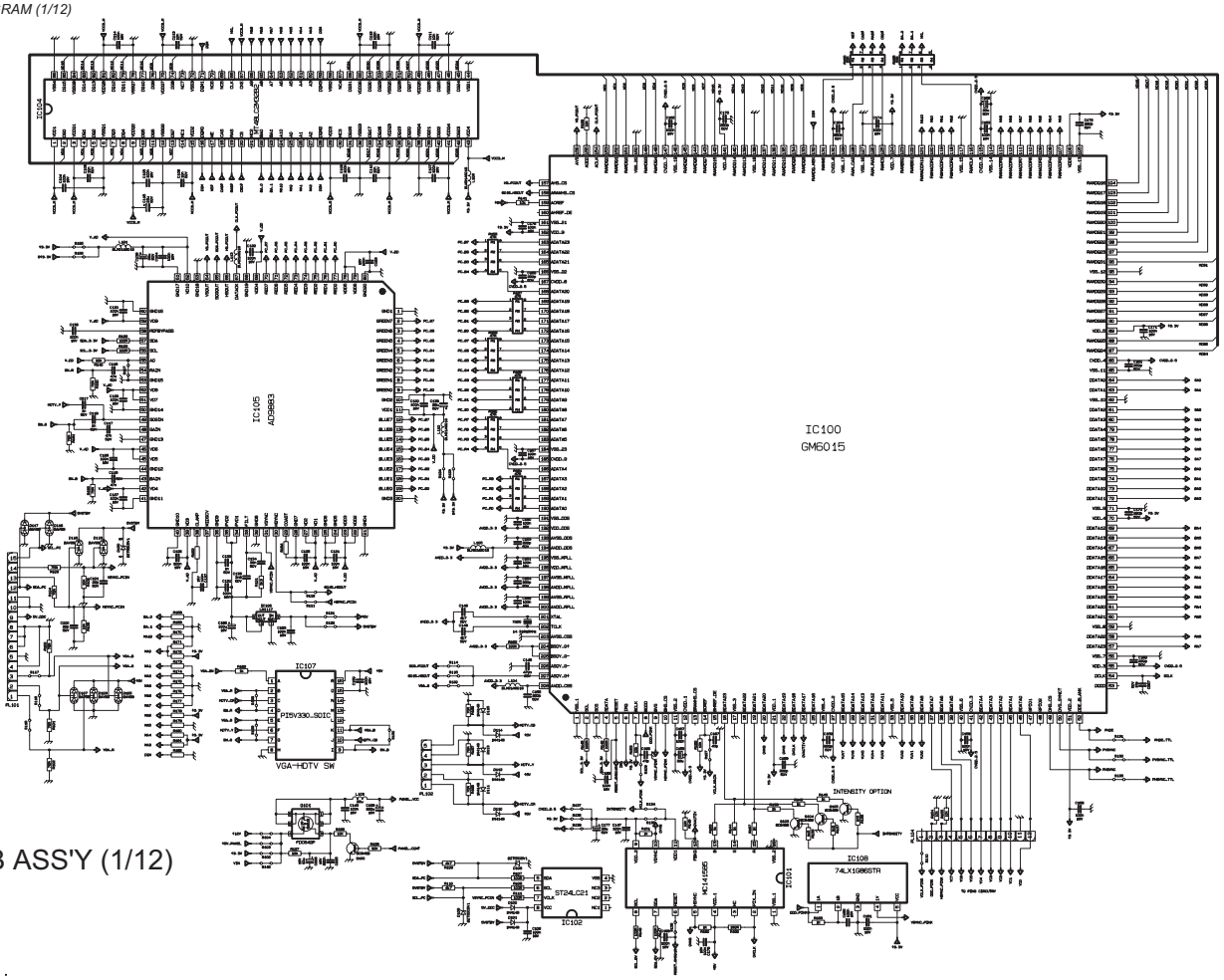


BLOCK DIAGRAM [IDTV PARTS]



CIRCUIT DIAGRAMS

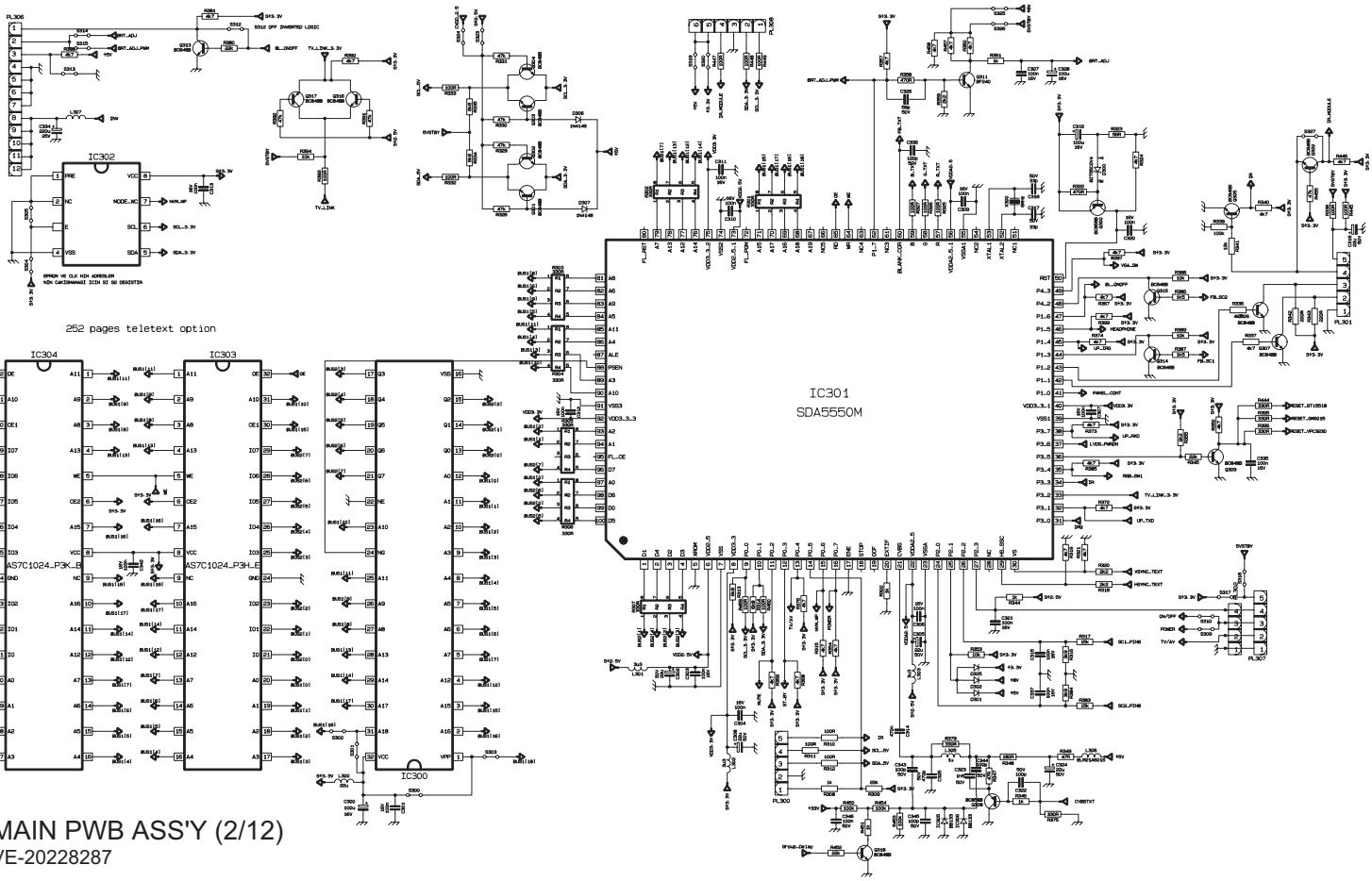
MAIN PWB CIRCUIT DIAGRAM (1/12)



MAIN PWB ASS'Y (1/12)

VE-20228287

MAIN PWB CIRCUIT DIAGRAM (2/12)

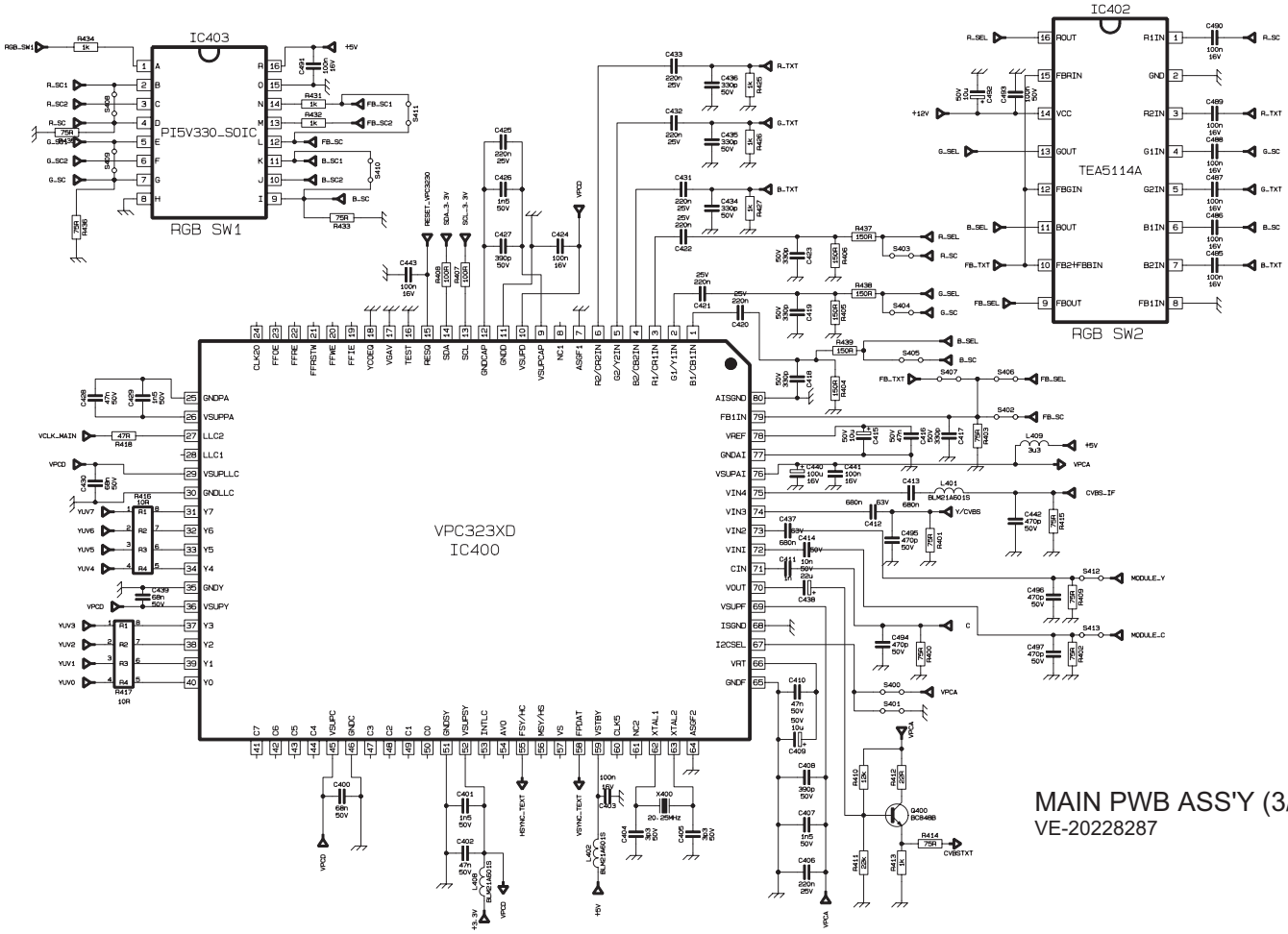


MAIN PWB ASS'Y (2/12)

VE-20228287

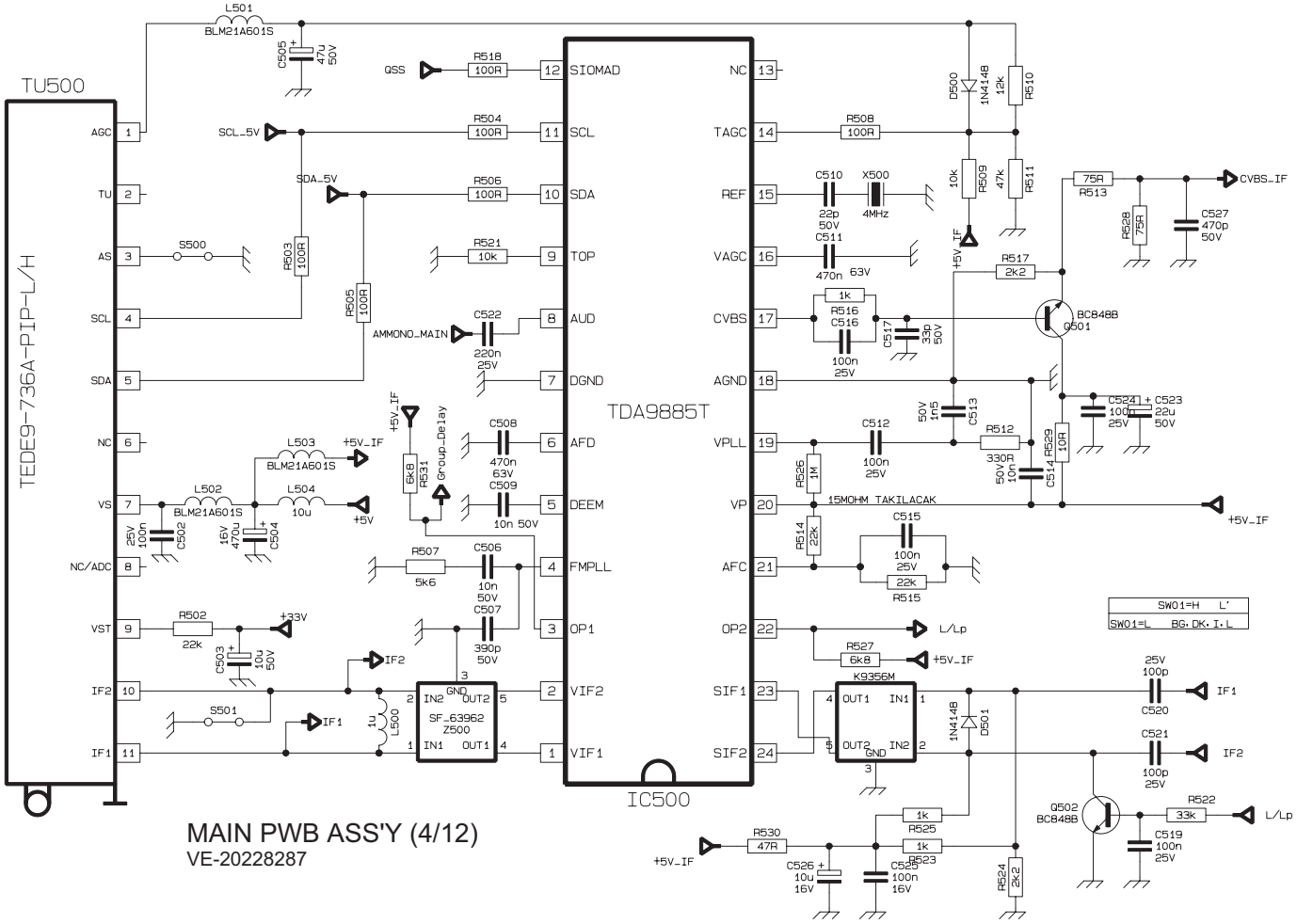
NOTE : Refer to the part list for the part number of IC300 and IC302.

MAIN PWB CIRCUIT DIAGRAM (3/12)



MAIN PWB ASS'Y (3/12)
VE-20228287

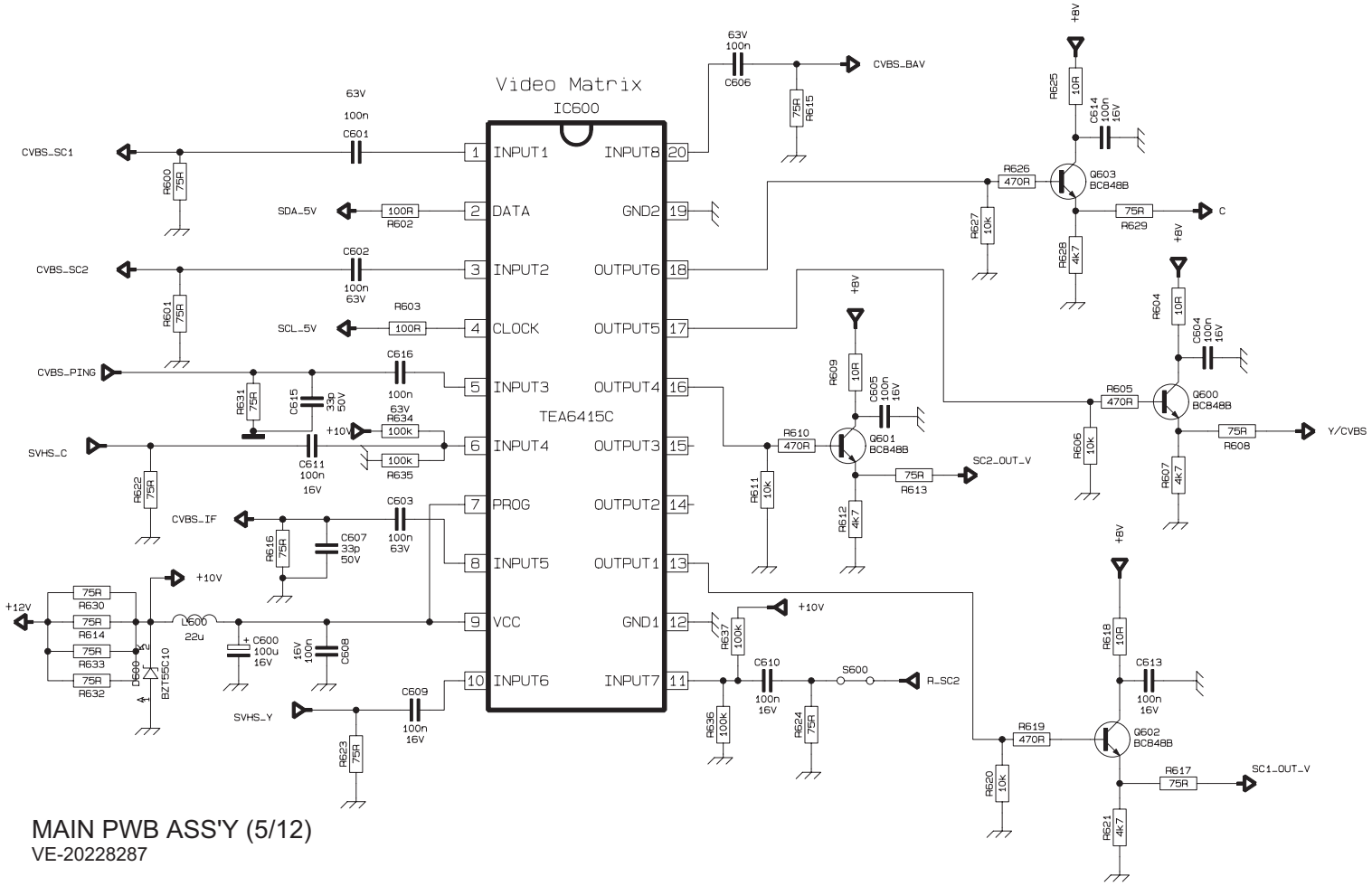
MAIN PWB CIRCUIT DIAGRAM (4/12)



MAIN PWB ASS'Y (4/12)

VE-20228287

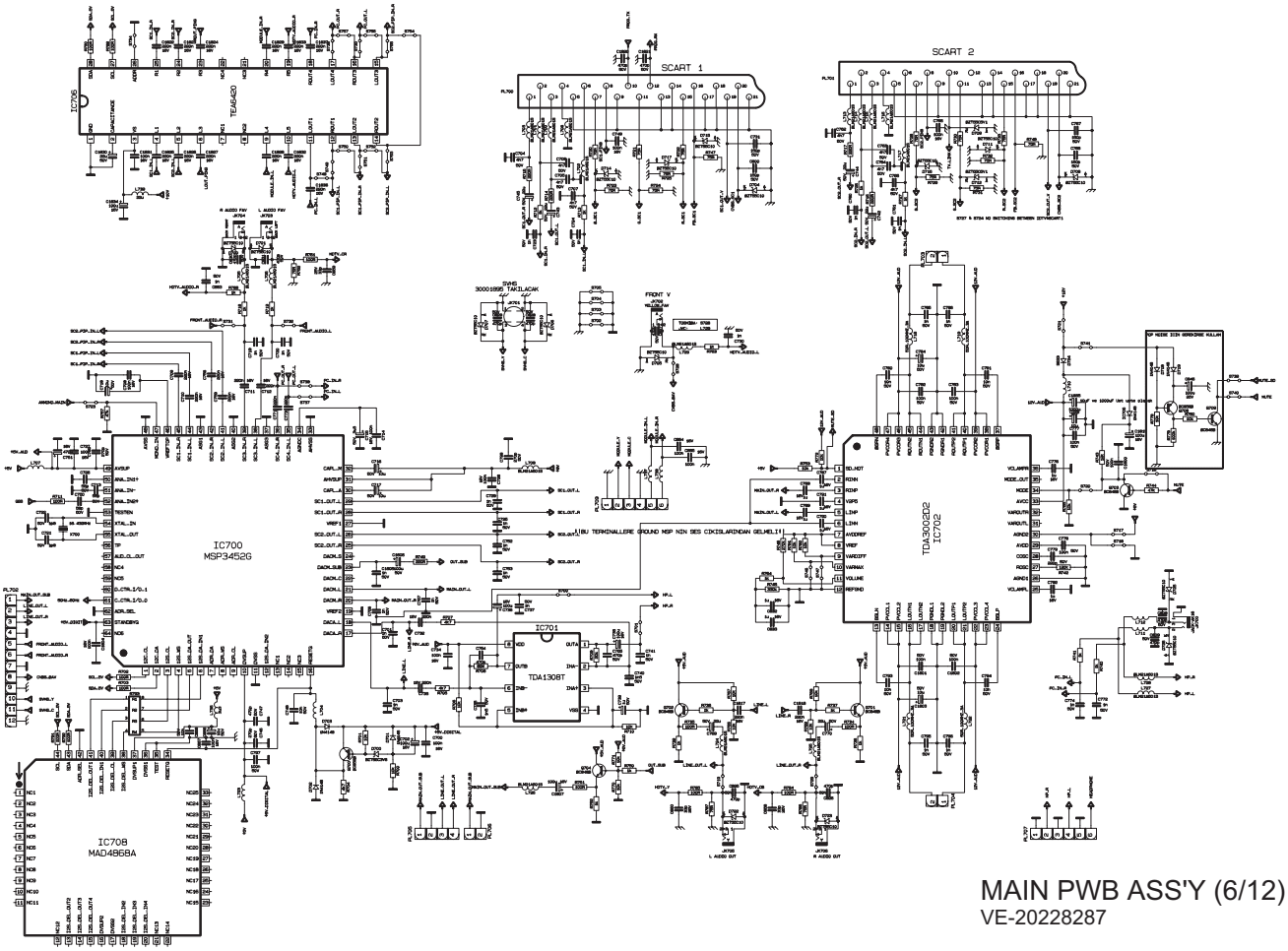
MAIN PWB CIRCUIT DIAGRAM (5/12)



MAIN PWB ASS'Y (5/12)

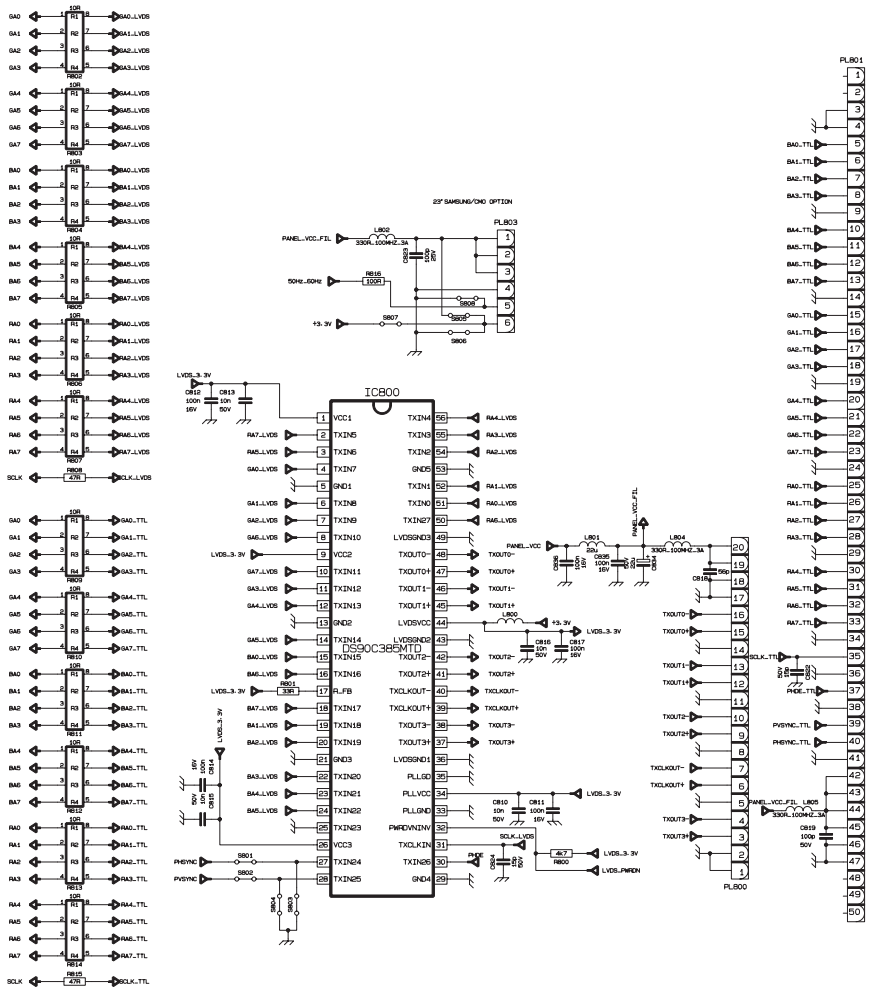
VE-20228287

MAIN PWB CIRCUIT DIAGRAM (6/12)



MAIN PWB ASS'Y (6/12)
VE-20228287

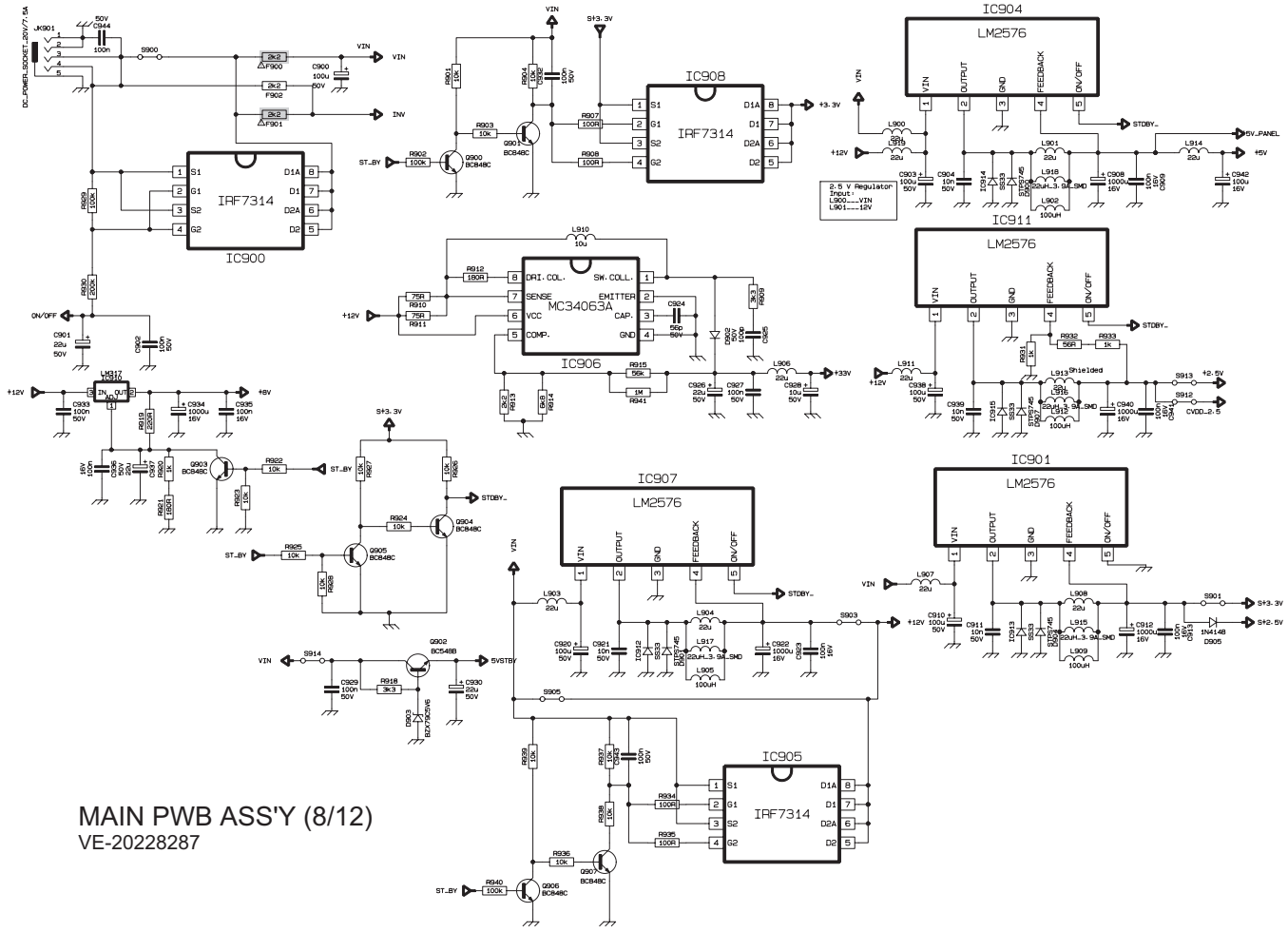
MAIN PWB CIRCUIT DIAGRAM (7/12)



MAIN PWB ASS'Y (7/12)

VE-20228287

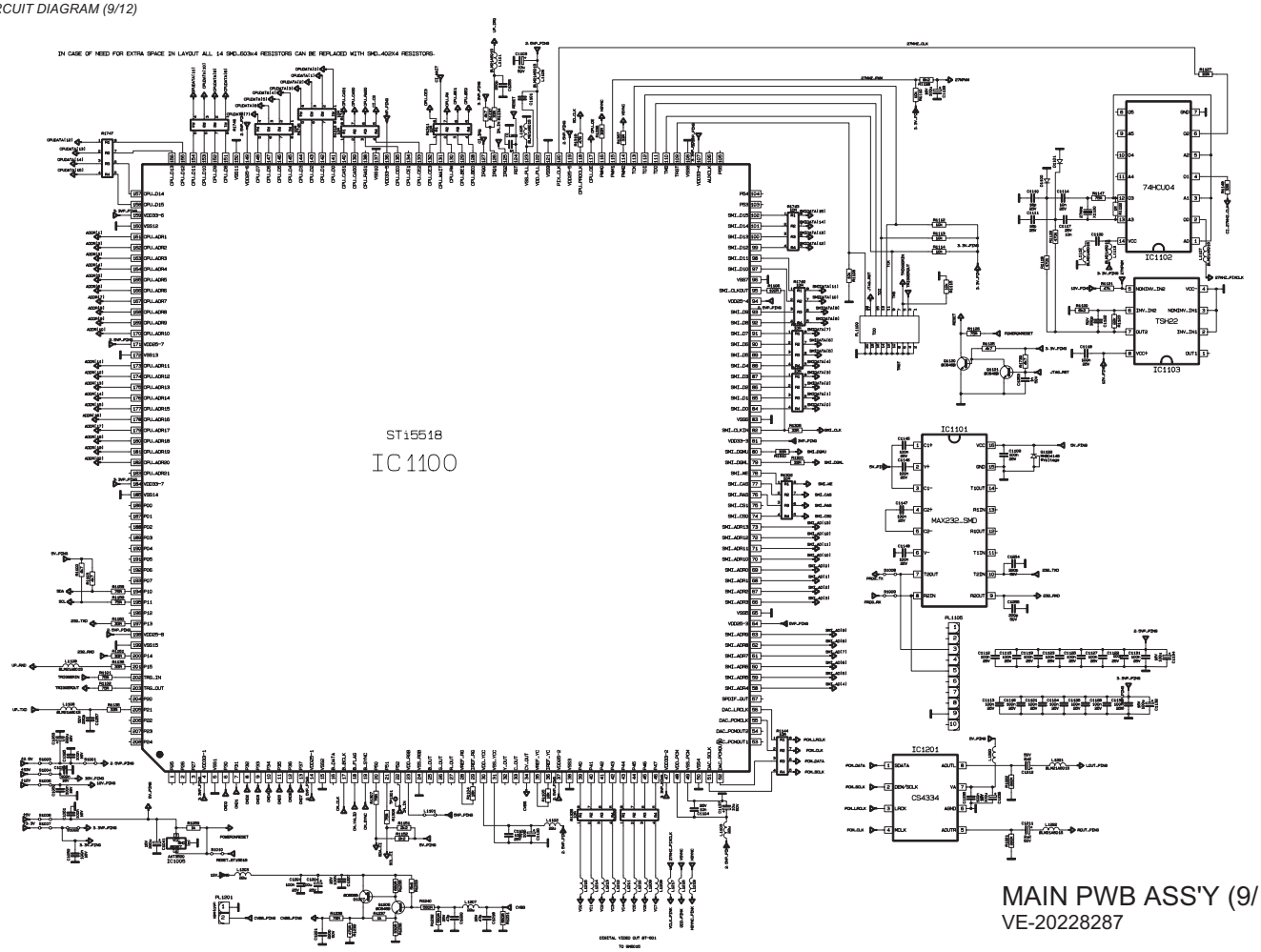
MAIN PWB CIRCUIT DIAGRAM (8/12)



MAIN PWB ASS'Y (8/12)

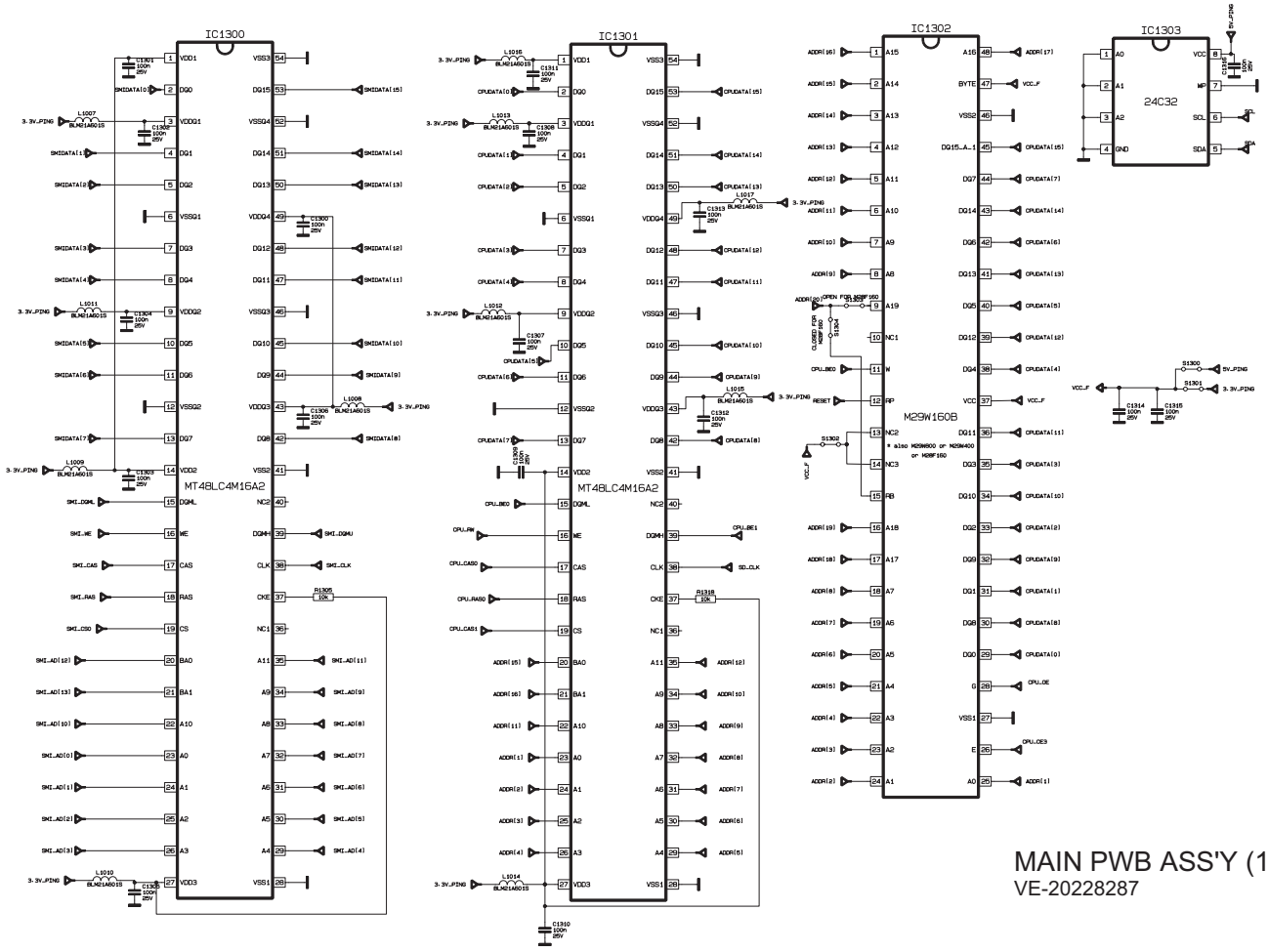
VE-20228287

MAIN PWB CIRCUIT DIAGRAM (9/12)



MAIN PWB ASS'Y (9/12)
VE-20228287

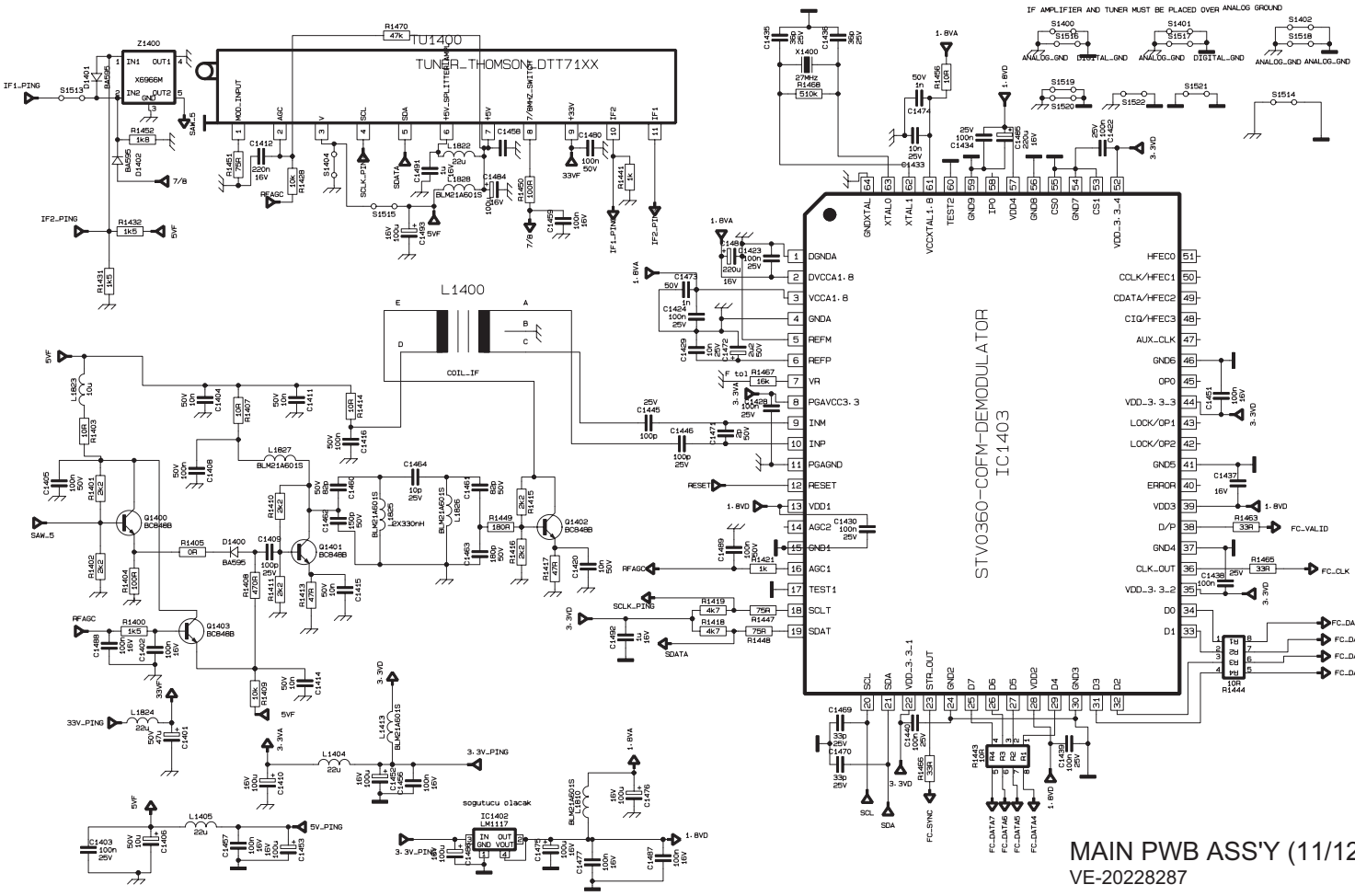
MAIN PWB CIRCUIT DIAGRAM (10/12)



(No.YA354)2-25 2-26(No.YA354)

MAIN PWB ASS'Y (10/12)
VE-20228287

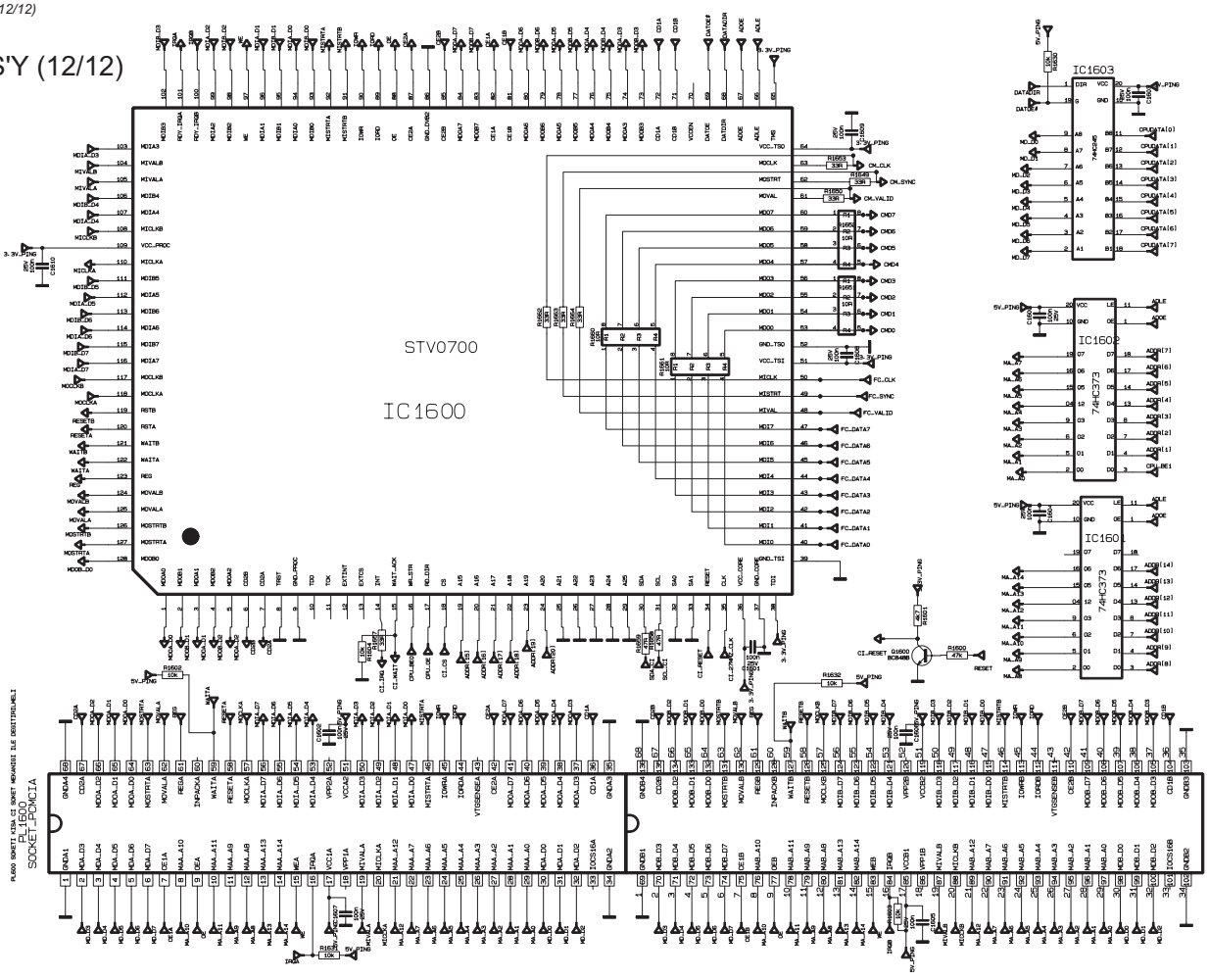
MAIN PWB CIRCUIT DIAGRAM (11/12)



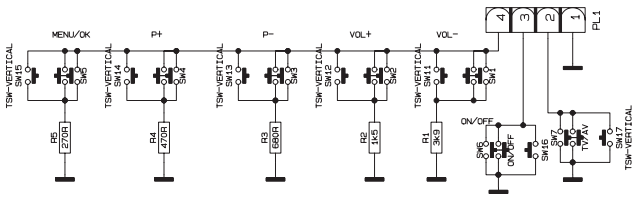
MAIN PWB ASS'Y (11/12)
VE-20228287

MAIN PWB ASS'Y (12/12)

VE-20228287

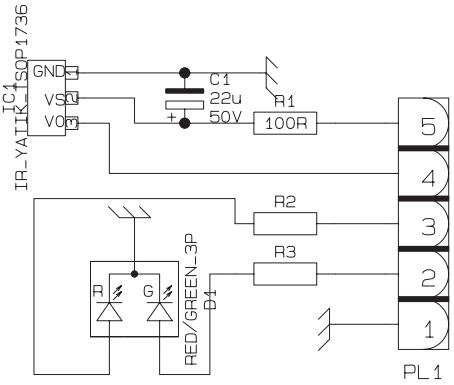


SIDE CONTROL PWB CIRCUIT DIAGRAM



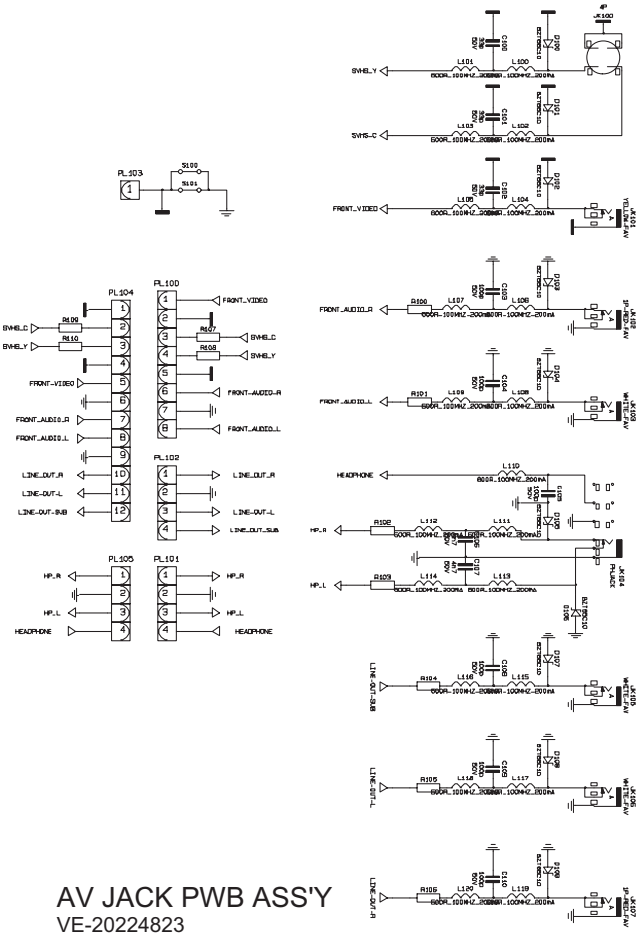
SIDE CONTROL PWB ASS'Y
VE-20224821

LED PWB CIRCUIT DIAGRAM



LED PWB ASS'Y
VE-20220627

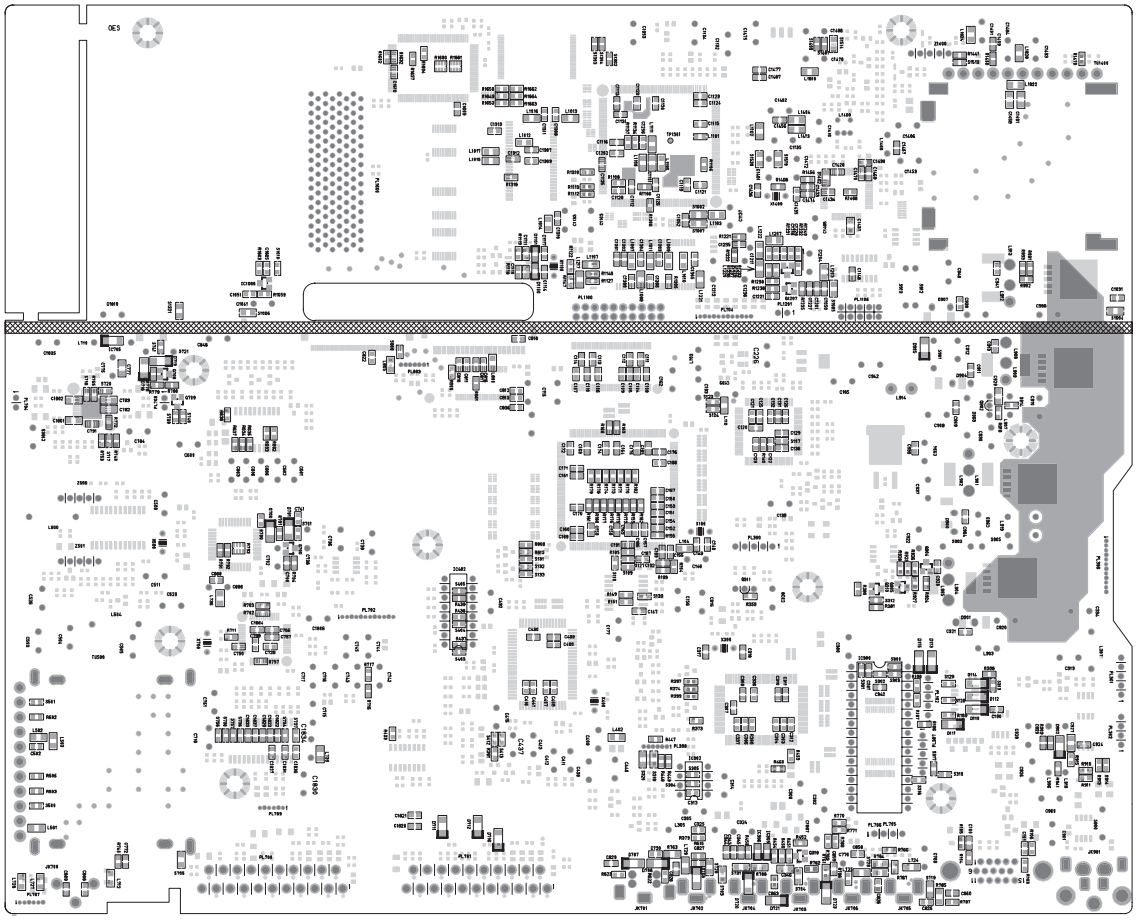
AV JACK PWB CIRCUIT DIAGRAM



AV JACK PWB ASS'Y
VE-20224823

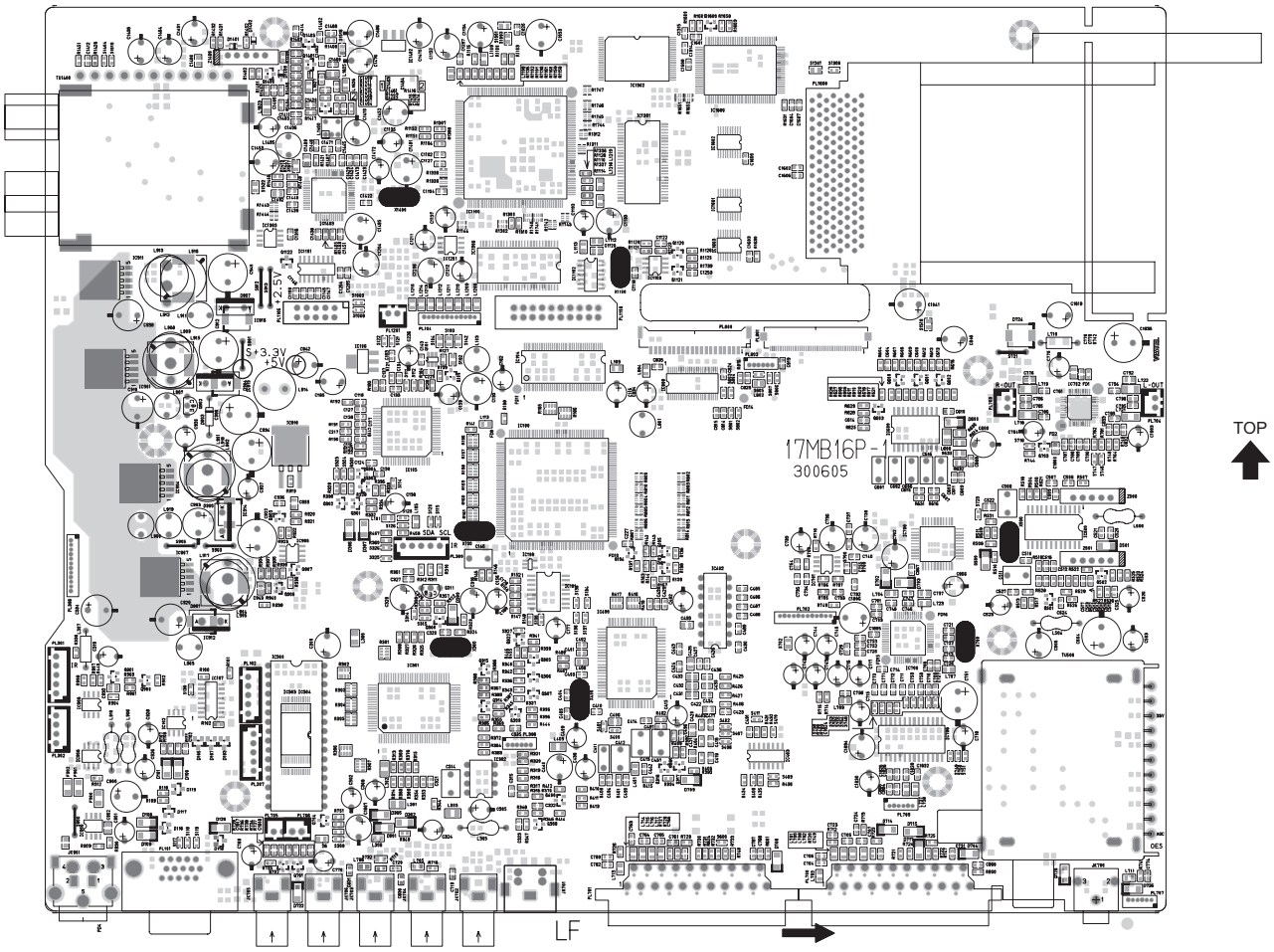
PATTERN DIAGRAMS

MAIN PWB PATTERN [SOLDER SIDE]

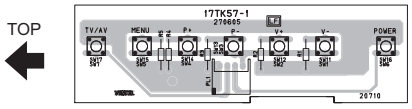


TOP

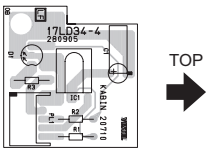
MAIN PWB PATTERN [PARTS SIDE]



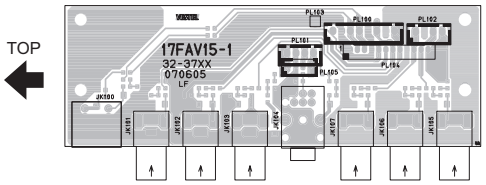
SIDE CONTROL PWB PATTERN



LED PWB PATTERN



AV JACK PWB PATTERN



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INTEGRATED DIGITAL WIDE LCD PANEL TV INSTRUCTIONS

Digital Video Broadcasting

Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996) Number: 3795

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For users in the UK:

If you have any problems setting up your new TV, please call the JVC Helpline on 0870330 5000

For users in the Republic of Ireland:

If you have any problems setting up your new TV, please call the JVC Helpline on 1890 - 582500

For your safety

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured. So, please read the points below for your own safety. They are of a general nature, intended to help you with all your electronic consumer products and some points may not apply to the goods you have just purchased.

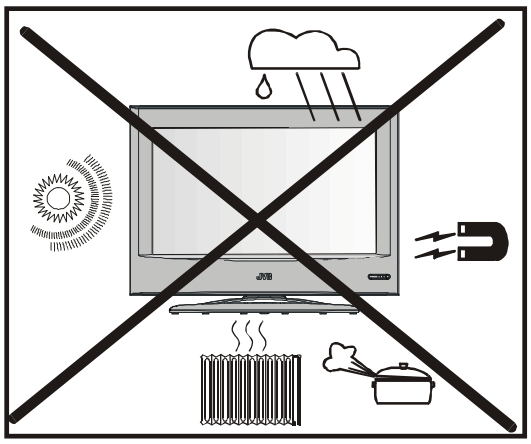
Some "DOs" and "DON'Ts" for you

Air Circulation…

Leave at least 10cm clearance around the television to allow adequate ventilation. This will prevent the TV from overheating and consequential possible damage to the TV. Dusty places should also be avoided.

Heat Damage…

Damage may occur if you leave the TV in direct sunlight or near a heater. Avoid places subject to extremely high temperatures or humidity, or locations where the temperature is likely to fall below 5ºC (41ºF).



Mains Supply…

The mains supply required for this equipment is **100 -240 AC, 50 Hz.** Never connect to a DC supply or any other power source. DO ensure that the TV is not standing on the mains lead. DO NOT cut off the mains plug from this equipment, this incorporates a special Radio Interference Filter, the removal of which will impair its performance.

Hot / Moderate Climate Conditions

This device is suitable for working in hot and moderate climate conditions.

IF IN DOUBT PLEASE CONSULT A COMPETENT ELECTRICIAN.

DO…

DO read the operating instructions before you attempt to use the equipment.

DO ensure that all electrical connections (including the mains plug, extension leads and inter-connections between pieces of equipment) are properly made and in accordance with the manufacturers' instructions.

Switch off and withdraw the mains plug before making or changing connections.

DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

DO be careful with glass panels or doors on equipment.

DO NOT…

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T obstruct the ventilation openings of the equipment with items such as newspapers,

table-cloths, curtains etc. Overheating will cause damage and shorten the life of the equipment.

DON'T allow electrical equipment to be exposed to dripping or splashing or objects filled with liquids, such as vases, to be placed on the equipment.

DON'T place hot objects or naked flame sources, such as lighted candles or night-lights on, or close to the equipment. High temperatures can melt plastic and lead to fires.

DON'T use makeshift stands and NEVER fix legs with wood screws. To ensure complete safety, always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T listen to headphones at high volume, as such use can permanently damage your hearing.

DON'T leave equipment switched on when it is unattended, unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off using the switch on the equipment and make sure your family know how to do this. Special arrangements may need to be made for infirm or handicapped people.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or it is damaged in any way – switch off, withdraw the mains plug and consult your dealer.

DON'T put the empty batteries into garbage instead of recycle bin to reduce harmfull effects to the environment.

ABOVE ALL – NEVER let anyone, especially children, push anything into holes, slots or any other openings in the case – this could result in a fatal electric shock.

NEVER guess or take chances with electrical equipment of any kind – it is better to be safe than sorry.

To fully disconnect the TV, switch off the mains socket and remove the Power plug.

Safety Precautions for Power adapter

- Be careful! May become hot.
- For indoor and dry location use only.
- Risk of electric shock.
- Shock hazard, do not open.
- Keep all power adapters away from any other heat source.
- Always use power adapter(s) well-ventilated area.

*** Cold cathode fluoresant lamp in LCD PANEL contains a small amount of mercury, please follow local ordinates or regulations for disposal.*

"The LCD panel is very high technology product with about a million thin film transistors, giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product." Please note that certain light guns used with games consoles may not work on this product.

Warning:

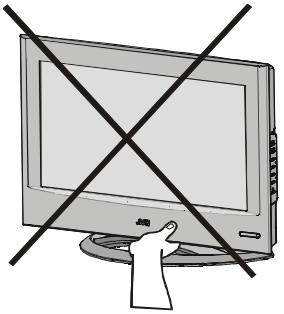
This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

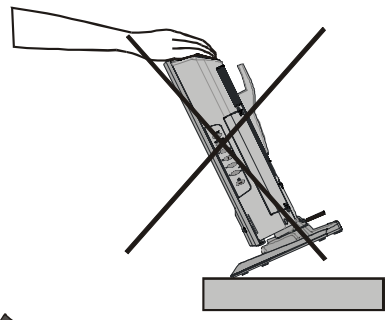
WARNING

• Fingers may be trapped under the TV causing injuries. Hold the TV at the bottom in the middle, and do not allow it to tilt up or down.

• The TV may fall causing injuries. Hold the bottom of the stand with your hand and tilt the TV up and down.

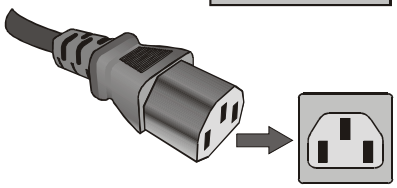
• Do not allow children to hang from the TV, place their elbows on the TV or lean against the TV. Doing so may cause the TV to fall over and lead to injuries.





CAUTION:

• To avoid electric shock or damage to the unit, first firmly insert the small end of the power cord into the AC Adapter unit it is no longer wobbly, and then plug the larger end of power cord into an AC outlet.



Important Instruction

For your own safety read following instruction carefully before attempting to connect this unit to the mains supply.

MAINS (AC) OPERATION

The wires in this mains lead are coloured in accordance with the following code :

BLUE-NEUTRAL

BROWN-LIVE

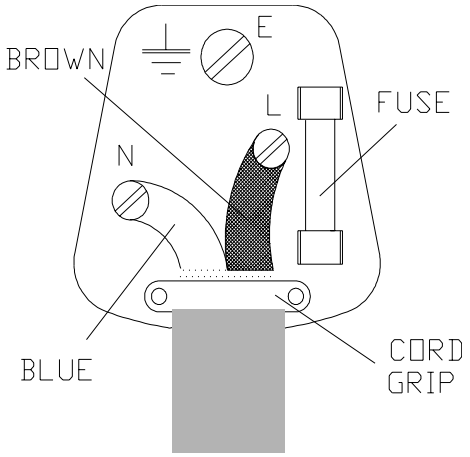
As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

No connection is to be made to the earth terminal of the plug.

If a 13 Amp (BS 1363) Plug is used a 5 Amp Fuse must be fitted, or if any other type of Plug is used a 5 Amp Fuse must be fitted, either in the Plug of Adaptor, or on the Distribution Board.



CAUTION

TO PREVENT ELECTRIC SHOCK DISCONNECT FROM THE MAINS BEFORE REMOVING COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

SAFETY PRECAUTION

THIS EQUIPMENT MUST BE DISCONNECTED FROM THE MAINS WHEN NOT IN USE. DO NOT ALLOW THIS UNIT TO BE EXPOSED TO RAIN OR MOISTURE.

Where to install

WARNING

- **When you install the TV on the wall, only use a JVC wall mounting unit which is designed for this TV.**
- **Make sure the TV is installed on the wall by a skilled installer.**

Locate the TV away from direct sunlight and strong lights, soft, indirect lighting is recommended for comfortable viewing. Place on a sturdy platform, the mounting surface should be flat and steady, it should then be secured to the wall with a sturdy tie using the hook on the back of the TV, this will prevent it from falling over. Use curtains or blinds to prevent direct sunlight falling on the screen.

A floor and table top stand are available for this television, or and angled bracket which enables the TV to be wall-mounted.

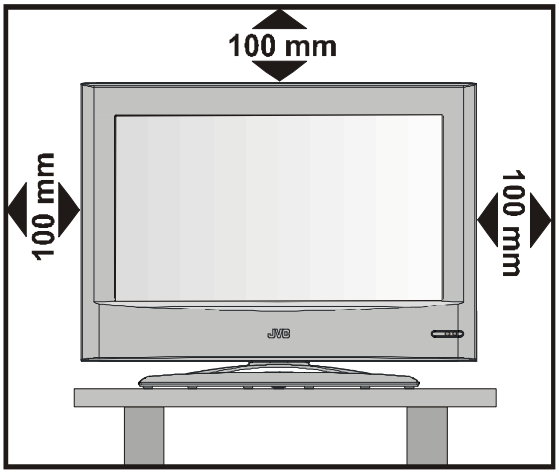
The LCD display panels are manufactured using an extremely high level of precision technology, however sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.

Make sure the TV is located in a position where it cannot be pushed or hit by objects, as pressure will break or damage the screen.

Distance Recommendation

Install the TV on solid horizontal surface such as a table or desk.

For ventilation, leave a space of at least 10 cm free all around the set. To prevent any fault and unsafe situations, please do not place any objects on top of the set.



Important Information

Please take note

EXCLUSION CLAUSE

JVC shall under no circumstances be liable for loss and/or damage to the product caused by:

- fire;
- earthquake;
- accidental damage;
- intentional misuse of the product;
- use of the product in improper conditions;
- loss and/or damage caused to the product whilst in the possession of a third party;
- any damage or loss caused as a result of the owner' s failure and/or neglect to follow the instructions set out in the owner's manual;
- any loss or damage caused directly as a result of misuse or malfunction of the product when used simultaneously with associated equipment;

Furthermore, under no circumstances shall JVC be liable for any consequential loss and/or damage including but not limited to the following, loss of profit, interruption of business, the loss of recorded data whether caused during normal operation or misuse of the product.

WARNING! NEVER LEAVE A STATIONARY IMAGE ON THE SCREEN

If stationary images generated by TELETEXT, CHANNEL IDENTIFICATION LOGOS, COMPUTER DISPLAYS, VIDEO GAMES, ON SCREEN MENUS, etc. are left on the TV screen for any length of time, they could become permanently ingrained.

If you use your television to display completely still images, or moving pictures which have a permanent still image superimposed e.g. broadcast network logos, it is always advisable to reduce BOTH the brightness and contrast settings.

Care and disposal

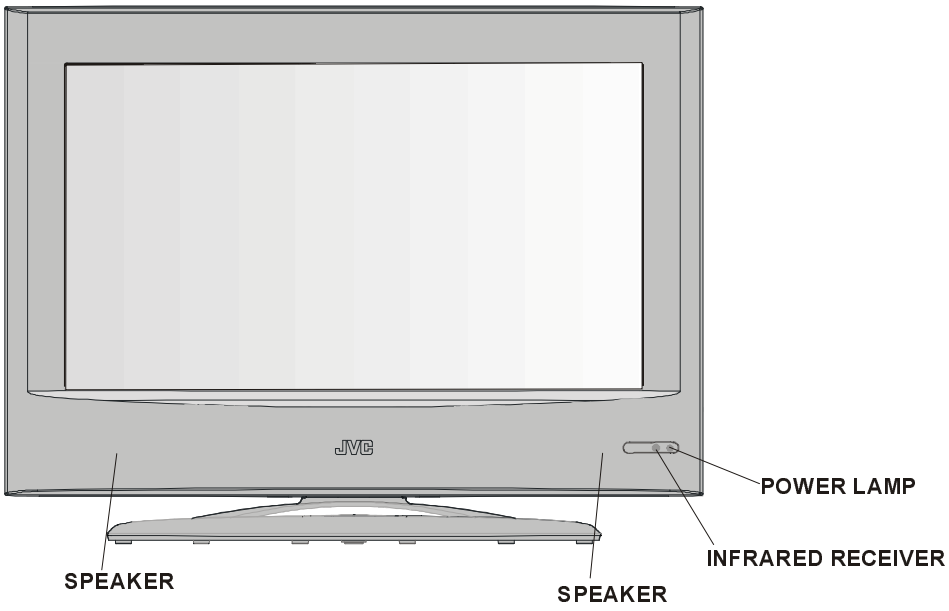
Cleaning the screen and cabinet...

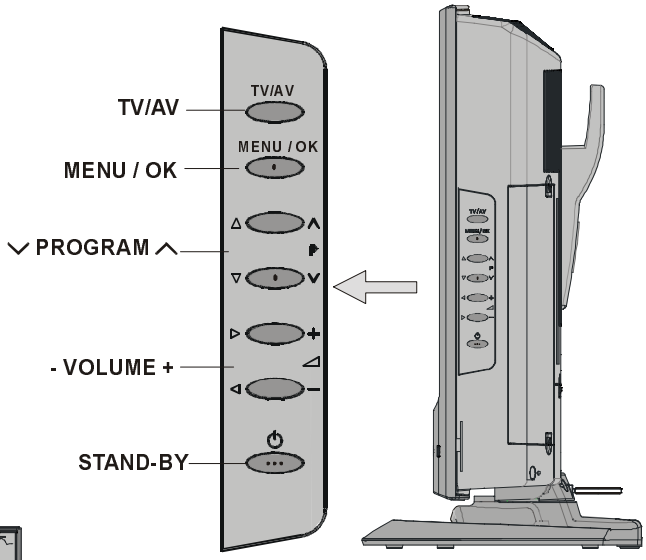
Turn off the power, clean the screen and cabinet with a soft, dry cloth. We recommend that you do not use any proprietary polishes or solvents on the screen or cabinet as this may cause damage.

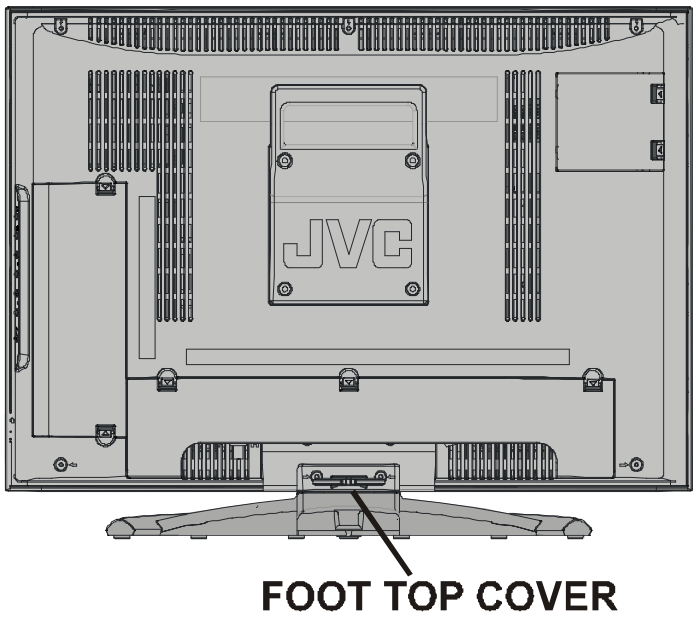
Disposal...

When the set reaches the end of its useful life please dispose of it in accordance with Local Government Regulations or at a recycling centre.

Control Panel Buttons







With certain combinations of connectors and leads the back cover may not be easily fitted. If the cover is left off, this in no way infringes safety requirements.

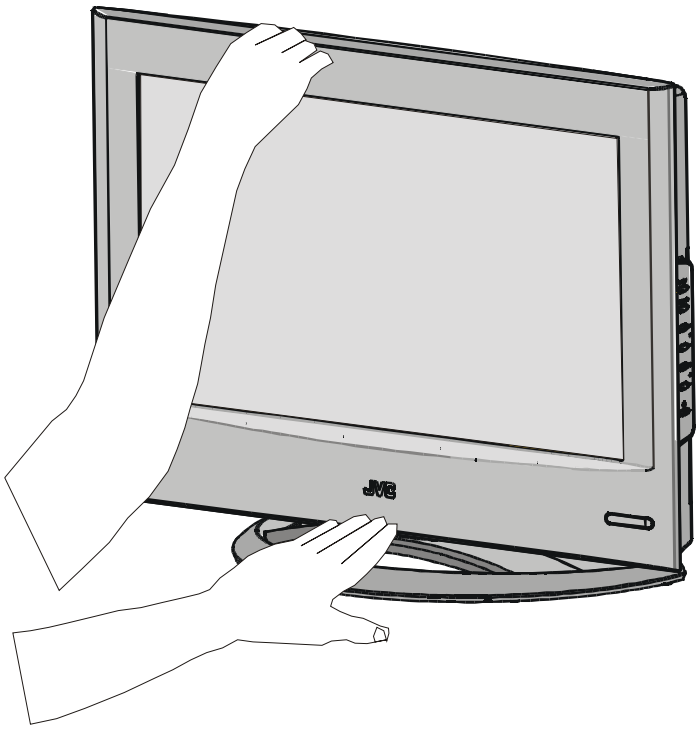
Using the stand

This TV comes with a Table Top Stand already attached.

This stand can be used to adjust the direction of the TV screen 10° backward and 5° forward.

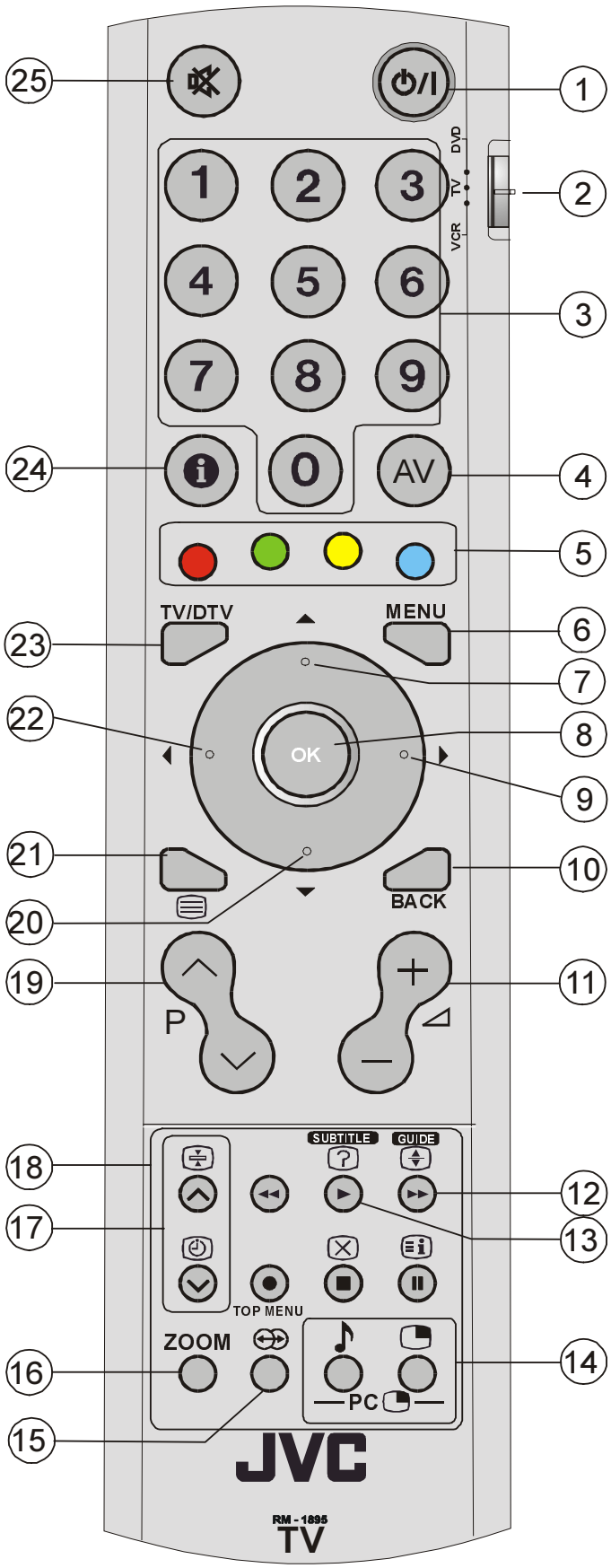
Tilt the TV up and down:

While holding the bottom of the stand with one hand, use your other hand to hold the middle of the top of the TV and slowly tilt the TV up and down.



Remote Control Buttons

① ⏻ / I = (Stand By) button
② TV / VCR / DVD Switch
③ Number buttons
④ **AV** button
(EXT-1, EXT-2, EXT-2S, EXT-3, EXT-4, EXT-4S, PC, DIGITAL TV)
⑤ Colour button
⑥ **MENU** = Menu button
⑦ ▲ = Cursor Up button
⑧ OK button
⑨ ▶ = Cursor Right button
⑩ **BACK** = Back button
⑪ ◿ = Volume - /+ buttons
⑫ **GUIDE** button
⑬ **SUBTITLE** button
⑭ PC Control buttons
⑮ ⇔ = Hyper Sound On/Off button
⑯ **ZOOM** = Zoom button
⑰ ∧/∨ buttons
⑱ IDTV/ VCR/ DVD/ Teletext Control buttons
⑲ P∧/∨ buttons
⑳ ▼ = Cursor Down button
㉑ ▤ = Teletext button
㉒ ◀= Cursor Left button
㉓ **TV / DTV** button
㉔ ⓘ = Information Button / T-V Link in Program Menu
㉕ 🔇 = Mute button



Features

- It is a remote controlled Integrated Digital colour television and PC monitor.
- 100 programmes from VHF, UHF bands or cable channels can be preset.
- It can tune cable channels.
- Controlling the TV is very easy by its menu driven system.
- It has 2 pieces of Euroconnector socket for external devices (such as video, video games, audio set, etc.)
- S-Video and AV inputs are available.
- Optional stereo sound systems (German or German+Nicam) are available.
- Multilanguage OSD.
- Teletext (Fastext, 7 pages).
- It is possible to connect headphone.
- A.P.S. (Automatic programming system)
- PLL (Frequency Search)
- All programmes can be named.
- Forward or backward automatic tuning.
- Sleep timer.
- Child lock.
- Auto, Full, Regular, Panoramic, 14:9 Zoom, 16:9 Zoom,16:9 Zoom Subtitle modes.
- Automatic sound mute when no transmission.
- When no valid signal is detected, after 5 minutes the TV switches itself automatically to stand-by mode.
- NTSC Playback.
- TV Picture in PC (if PC input available).
- PC input (Support Up to 1360 x 768)
- Plug&Play for Windows 9X, ME, 2000, XP
- PC Audio input

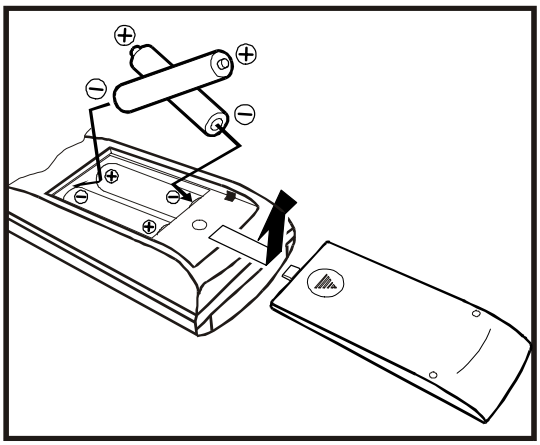
Follow Step 1 to 7 to set up your TV:

Step 1: Checking the accessories supplied

- Remote control unit x 1
- AA/R6 battery x 2
- AC adapter x 1
- Power cord x 1

Step 2: Inserting batteries

- Remove the battery cover located on the back of the remote control by gently pulling upwards from the indicated part.
- Insert two AA/R6 dry cell or equivalent type of batteries inside.
- Replace the battery cover.



NOTE: *Remove the batteries from remote control when it is not to be used for a long period.Otherwise it can be damaged due to any leakage of battery.*

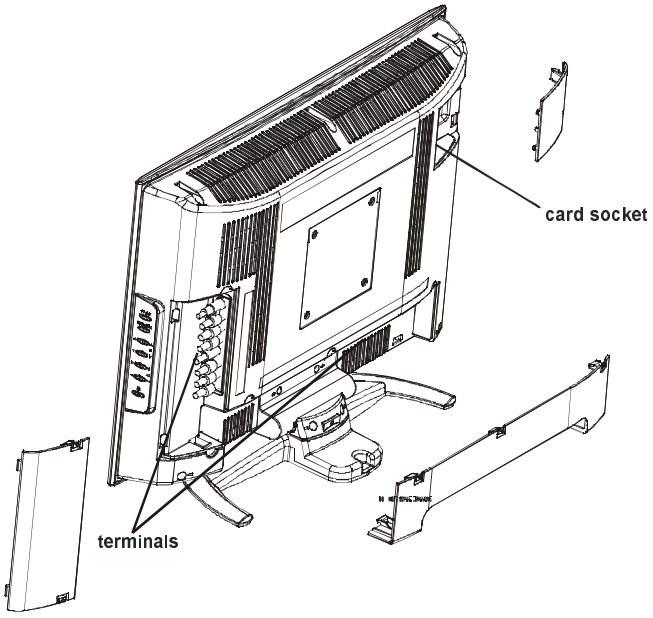
Old batteries must be disposed in a designated area. If performance of the remote control reduces, replace the batteries with the correct type. Do not combine a used, old battery or a new one or mixed battery types. Remove dead batteries immediately to prevent acid from leaking into the battery compartment.

Step 3: Removing the terminal cover

There are connection terminals and a card socket behind the covers of the rear of the TV. Remove the cover before connecting an antenna, VCR, DVD and other devices.

Remove the covers by removing the hooks. When replacing the covers, place the side or bottom of the covers against the TV and insert the hooks.

- Leave the covers off if they do not fit properly. DO NOT force to replace the covers. Doing so may cause damages of the connection cables and the covers.
- Leave these covers off when mounting the TV on a wall.



• 100 mm mount based on VESA regulation is equipped.

• The handle and the stand can be left by loosing the screws with a screwdriver when mounting the TV on a wall.

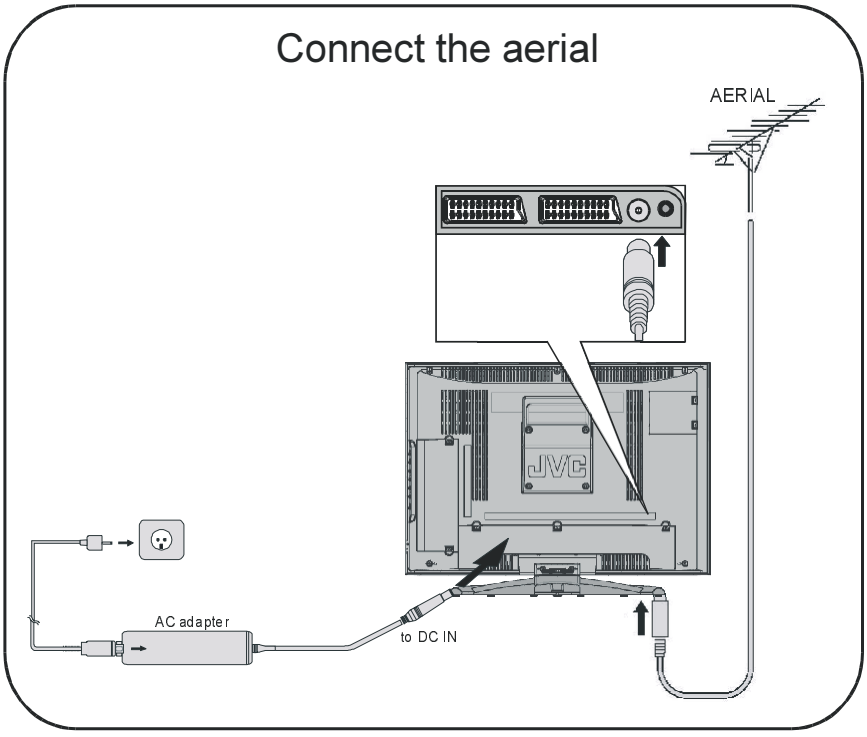
• Spread a soft cloth on a flat table and then place the TV on the cloth with the screen facing downwards when you leave the handle and the stand.

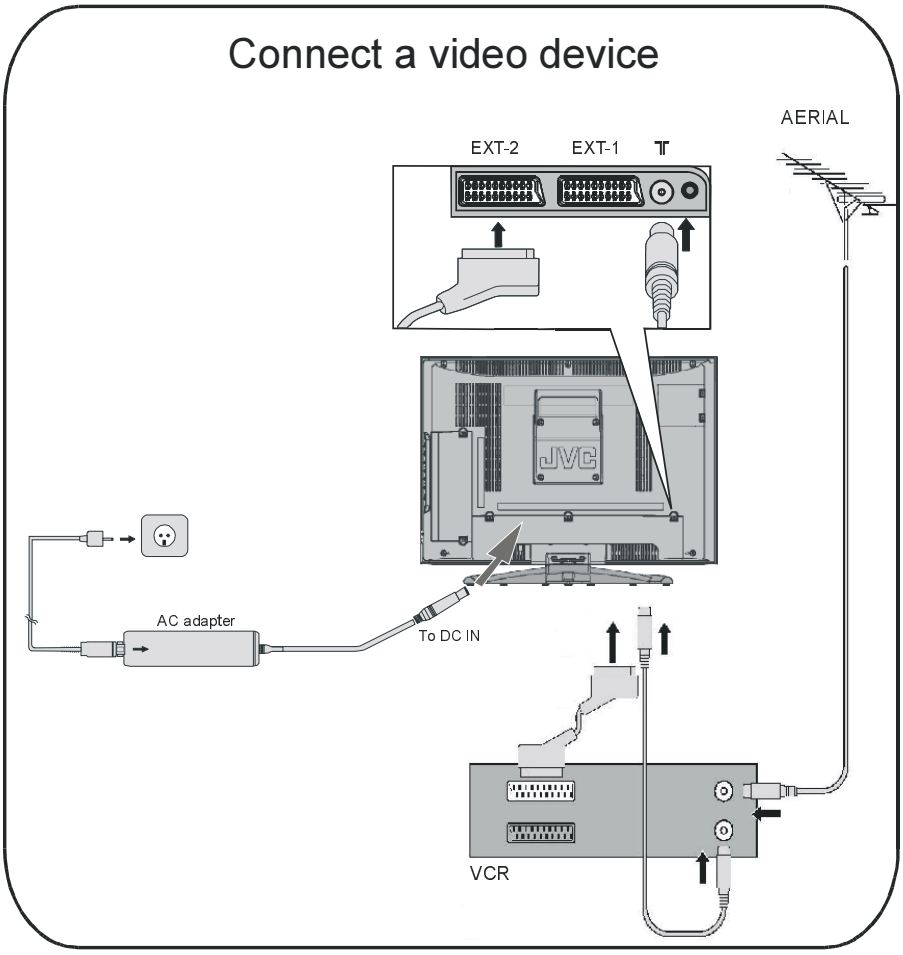
Step 4: Connecting an aerial VCR and mains

Please read the user manual of each device before connecting, to ensure a correct setup.

It is necessary to connect aerial to watch TV.

Please see “Peripheral Equipment Connections” on page 39 for connections to other devices.



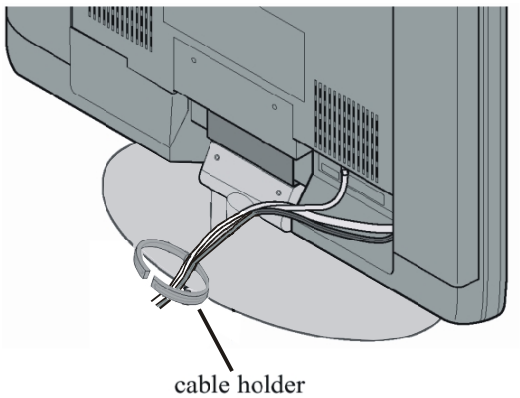


IMPORTANT:

- Only use the adaptor supplied with this TV.
- The TV set is designed to operate on 24 V DC. For this, an adaptor is used which gives 24 V DC voltage. Connect this adaptor to a system that supplies 100-240 V AC, 50 Hz.

Step 5: Using the cable holder

A cable holder which is used to keep the connection cables tidy is supplied. Attach the cable holder to the hole on the back of the stand, then gather together the connection cables and put them inside the holder.



Step 6: Switching the TV ON/OFF

To switch the TV on

Your TV will switch on by two steps:

1- Connect the power supply cord to the system. Then the TV switches itself to stand-by mode and the power lamp becomes red located on the front of the TV.

2- To switch on the TV from stand-by mode either:

Press the "⏻ / |" button on the remote control or on the right side of the TV

or.

press a digit button on the remote control so that a programme number is selected,

or,

Press "P∨" or "P∧" buttons on the right side of the TV or on the remote control, so that last switched off programme is selected.

By either ways the TV will switch on and the power lamp will become green.

To switch the TV off

• Press the "⏻ / |" button on the remote control or on the right side of the TV, so the TV will switch to stand-by mode and the power lamp will become red.

NOTE: To switch the TV off completely remove the mains plug from the socket.

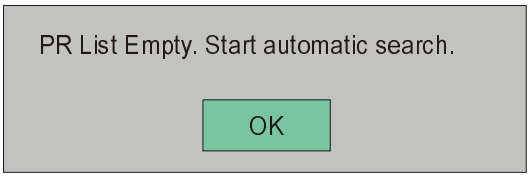
Step 7: Initial settings

When the TV is first turned on, it goes into the initial settings mode. Follow the instructions on the screen display to make the initial settings.

Note: *If the TV does not go into the initial settings mode this is because your TV has already been turned on for the first time. (Perform the initial settings with "INSTALLATION" (see page 25) in the DTV menu and "AUTO STORE" (Analogue) (see page 32) in the PROGRAM menu.)*

Because this is the first time that IDTV has been used, there are no channels stored in the memory and below information will be displayed on the screen.

1. Press the [OK] button to start the automatic search.



The IDTV will automatically tune to the UHF transmission channels 21 to 68 looking for digital terrestrial TV broadcasts and displaying the names of channels found. This process will take about five minutes. To cancel searching, you can press MENU button at any time during the process.

HINT: *Depending on the reception conditions in your particular area, you may find that the list of channels found includes one or more repeated names. This is because the receiver may detect and store some channels, including those it cannot receive clearly, from adjacent areas alongside the strong channels from a transmitter nearby. This is not a problem and the weaker channels can be deleted from the receiver later, as described in - Edit PR List on page 23.*

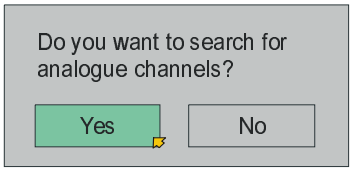
2. When the automatic search has finished, the EDIT PR LIST menu appears.

• If you want to, you can now edit the programme numbers (PR) using the EDIT PR LIST function. For details, see "Edit PR List" on page 23.

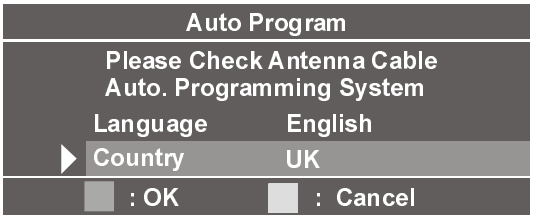
• If you do not want to edit programme numbers (PR), go to the next step.

3. Press the MENU button.

The EDIT PR LIST menu disappears and the following message appears.



If you select "Yes", Analogue terrestrial broadcasting AUTOMATIC PROGRAMMING SYSTEM (A.P.S.) window is displayed.



To cancel APS before starting, press BLUE button.

First of all choose the "**Language**" which the menus of the analogue part of the TV will appear. As soon as you change the language, the menu items will be displayed in the selected language. By pressing the "▲" or "▼" button, come to the "**Country**" item and select the country. This will affect the sort process in APS. Press RED button to start A.P.S.

After APS is finalized, a programme list will appear on the screen. In the programme list you will see the programme numbers and names assigned to the programmes.

If you press the BLUE button at any time while the A.P.S. is running, the A.P.S. will be ended.

If you do not accept the locations and / or the programme names of programmes, you can change them in Program menu. For details see PROGRAM menu on page 32.

If you do not have a T-V LINK compatible VCR, press MENU button to exit the menu.

If you have a T-V LINK compatible VCR connected to the EXT-2 terminal, press "ⓘ" button to display T-V LINK menu. Then follow the operating procedure "Downloading data to VCR" in the following T-V LINK section.

T-V LINK

When a T-V LINK compatible VCR connected to the EXT-2 terminal on the TV, it is easier to set up the VCR and to view videos. T-V LINK uses the following features:

To use T-V LINK functions

A "T-V LINK compatible VCR" means a JVC video cassette recorder with the T-V LINK logo, or with one of the following logos. For details see your VCR instruction manual.

"**Q-LINK**" (A trademark of Panasonic Corporation)

"**Data Logic**" (A trademark of Metz Corporation)

"**Easy Link**" (A trademark of Philips Corporation)

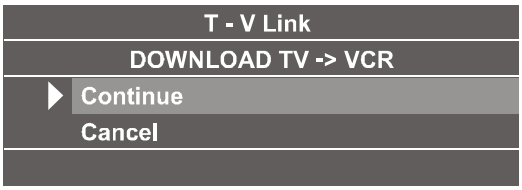
"**Megalogic**" (A trademark of Grundig Corporation)

"**SMARTLINK**" (A trademark of Sony Corporation)

Downloading data to VCR:

The VCR will automatically download the registered data on the TV channels from the TV. This means you do not need to set up the programme channels on your VCR manually.

The "T-V LINK" menu will be displayed when you press the "ⓘ" button while PROGRAM menu is displayed.



If you do not have a T-V LINK compatible VCR, select Cancel and press "►" or "OK" button to exit the menu.

Press "►" or "OK" button to start downloading data to VCR. "TRANSFER" is displayed in the menu.

If "FEATURE NOT AVAILABLE" is displayed, download was not performed correctly. Before trying to download again, check that:

- The VCR power is turned on.
- The VCR is T-V LINK compatible.
- The VCR is connected to EXT-2.
- The scart cable is fully wired.

Direct REC:

You can easily record to VCR the images that you are watching on the TV. For details, read the manual for your VCR. Use your VCR controls you can not carry out Direct REC using your TV control.

When the VCR is not ready (For example when there is no tape inserted), "NO RECORDING" is displayed.

When you press the following buttons (/ I, , TV / DTV, ZOOM, , , AV, MENU, SUBTITLE, GUIDE, , BACK, P / P, number buttons) during recording, a message appears asking if you want to stop recording or not. Press **OK** button to stop recording or BLUE button to continue recording.

Do not turn the TV off in the following cases:

- When recording images from an external device connected to TV (For example camcorder).
- When recording a TV channel after it has been unscrambled on a decoder.
- When recording a TV channel by using the TV's output because the VCR's own tuner can not properly receive that channel.
- When recording Digital terrestrial broadcasting (DVB-T).

TV autopower on/VCR image view:

When the VCR starts playing, the TV automatically turns on and images from EXT-2 appear on the screen.

This function does not happen if your TV's main power is turned off. Set your TV's main power to on (StandBy Mode).

Basic Operations

You can operate your TV using both the remote control and TV buttons.

Operation with the buttons on the TV

Volume Setting

- Press "**-**" button to decrease volume or "**+**" button to increase volume, so a volume level scale (slider) will be displayed at the middle of the bottom on the screen.

Programme Selection

- Press "**P**" button to select the next programme or "**P**" button to select the previous programme.

Switching input mode

- Pressing TV/AV/OK button will change the input mode.

Entering Main Menu

- Press "**MENU**" button to enter Main menu. In the Main menu select submenu using "**P**" or "**P**" button and enter the submenu using"**-**" / "**+**" or TV/AV or MENU/OK button. To learn the usage of the menus, refer to the Menu System sections.

Operation with Remote Control

The remote control of your TV is designed to control all the functions of the model you selected. The functions will be described in accordance with the menu system of your TV.

Functions of the menu system are described in following sections.

Volume Setting

Press "**+**" button to increase volume. Press "**-**" button to decrease volume. A volume level scale (slider) will be displayed in the middle at the bottom of the screen.

Programme Selection (Previous or next programme)

- Press "**P**" button to select the previous programme.
- Press "**P**" button to select the next programme.

Programme Selection (direct access):

Press digit buttons on the remote control to select programmes between 0 and 9. TV will switch to the selected programme. To select programmes between 10 - 99, press the digit buttons consecutively which programme you want to select (eg. for programme 27, first press 2 and then 7). When it is late to press second digit button only the first digit programme will be displayed. The limit of the delay time is 3 seconds.

Example: PR6 → press 6, PR12 → press 1 and 2.

Press directly the programme number to reselect single digit programmes.

Hint: *The channel list numbers are assigned by the broadcasters. Because not all channels are broadcast free-to-air and stored by the receiver, the channel list numbers do not run continuously. The fifteenth channel in the list, for example, may not be channel number 15 but channel number 17.*

Hint: *If you enter a number which does not correspond to a stored channel, the next valid channel number is selected instead. If you enter a number greater than the highest numbered channel in the channel list, the IDTV will select the last channel in the list.*

Operating while watching IDTV

Pressing the **TV/DTV** button at any time while watching television programmes will switch the TV set between displaying the digital terrestrial television broadcasting and its normal analogue broadcasting.

It is also used to switch to the last watched mode (TV or DIGITAL TV) from the EXT mode. For example; if a DVD player is connected with a SCART cable and powered on, then the IDTV will automatically switch to EXT mode. The IDTV will switch to the last watched mode (TV or DIGITAL TV) if DVD player is switched off or “TV/DTV” button is pressed.

EVERYDAY OPERATION

While using the **IDTV** to the full, there are great many buttons to use in different situations. Many of the menu screens displayed by the IDTV have reminders as to which button do what, at the base of the screen. In addition, many screens have further help available which is displayed when the ⓘ button is pressed, as prompted at the bottom right of the screen.

OVER AIR DOWNLOAD

Over Air Download (OAD): To ensure that your IDTV always has the most up-to-date information. Please ensure that after use it is set to its standby mode. At 3AM each day, the IDTV automatically searches for any new information which may be broadcast and will download this to your IDTV automatically. This operation will normally take approximately 30 seconds.

If you want to do this, you need to set Automatic Download to “Enabled” in Receiver Upgrade setting. For details see page 23.

INFORMATION BANNER

Whenever you change channel, using the P∨ / P∧ buttons or the number buttons, an information banner is displayed at the bottom of the screen. This will remain on the screen for approximately three seconds. The information banner can also be displayed at any time while watching TV by pressing the ⓘ button on the remote control. Pressing the ⓘ button again removes the banner.

Hint: *Not all channels broadcast the programme data. If the name and times of the programme is not available then “No Information” is displayed in the information banner.*

The information banner gives a number of facts on the channel selected and the programmes on it. The name of the channel is displayed, along with its channel list number and an indication of the strength of the signal received on this tuning channel.

The name and the start and finish time of the programme currently showing on the selected channel are given, and the current time.

Icons are also displayed in the information banner and if this channel is a favourite channel.

favorite channel icon

If the selected channel is locked, you must enter the correct four digit code to view the channel.

ELECTRONIC PROGRAMME GUIDE (EPG)

Another way of selecting a channel is with the electronic programme guide, or EPG. Like the Channel List, the EPG screen displays a list of the stored channels along with information on what programmes are being broadcast.

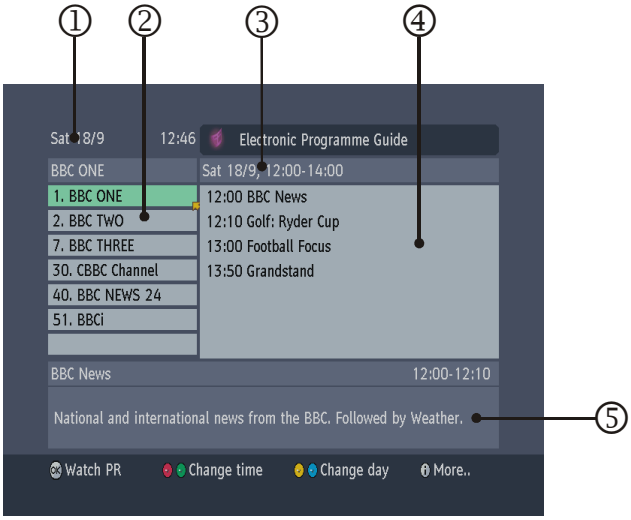
Using the Electronic Programme Guide

EPG can display 7 days programme guide, but in some areas only current and next programme guide is displayed.

By using EPG, you can select the channel and set the reminder for the programme which you do not want to miss.

To display the EPG screen, press the GUIDE button while watching Digital terrestrial broadcasting.

You can exit the EPG screen by pressing the GUIDE button again or the MENU button.



① Current date and time

② Channel listings

③ Selected date and time

④ Programme name and broadcast time

⑤ Brief description of the programme

• The programme name, broadcast time and a brief description of the programme are displayed for the programme chosen from the channel listings.

Choosing Channel

1. Press "▲" or "▼" buttons to choose the channel.

2. Press OK button.

The selected channel is displayed.

Programme Reminders

You can easily set the reminder so that you will not miss the programme you want to watch.

1. Press "▲" or "▼" buttons to choose the channel.

2. Press the Red and Green buttons to change the time and Yellow and Blue buttons to change the date.

3. Press "◀" or "▶" buttons and then "▲" or "▼" buttons to choose the programme you want to watch.

4. Press the OK button.

The reminder icon will be displayed on the right side of the chosen programme name and the setting is completed.

When the TV is being watched, it automatically changes to the channel of the reminded programme when the start time of the scheduled programme is reached.

• This function does not work when the TV is turned off.

To cancel the reminder setting

Display the EPG screen, choose a programme which has the reminder icon, and press the OK button.

Note:

• Reminder events are ignored if any timer event is active at that time.

• You can not set the reminder for the programme which has already started.

• "No Information" is displayed for the programme or channel which does not have any information. You can not set the reminder for these programmes.

DISPLAYING THE SUBTITLES

With Digital terrestrial broadcasting (DVB-T), some programmes are broadcast with subtitles. Subtitles can be displayed when watching these programmes.

- Press the SUBTITLE button when watching Digital terrestrial broadcasting (DVB-T).

  "Subtitle ON" appears at the top-left of the screen and, if programme has subtitles, the subtitles are displayed.
- When the SUBTITLE button is pressed again, "Subtitle OFF" appears and the subtitles disappear.

Subtitle ON

Subtitle OFF

DIGITAL TELETEXT

With Digital terrestrial broadcasting (DVB-T), in addition to pictures and sound, you can also watch digital teletext.

Digital teletext is sometimes broadcast at the same time as normal broadcasting.

1. Press the ☰ button.

The digital teletext information appears.

2. Operate it with the colour buttons, ◀/▶/▼/▲ buttons and OK button.

The operation method may differ depending on the contents of the digital teletext.

Follow the instructions displayed on digital teletext screen.

- When "Press SELECT" or similar message appears on the screen, press the **OK** button.
- When the ☰ (Text) button is pressed, the TV returns to television broadcasting.
- With Digital terrestrial broadcasting (DVB-T), in addition to digital teletext broadcasting at the same time as normal broadcasting, there are also channels with just digital teletext broadcasting.
- The aspect ratio when watching a channel with just digital teletext broadcasting is the same as the aspect ratio of the picture watched previously.
- When you press the ☰ (Text) button while subtitles are on, the subtitles are turned off. When you press the ☰ (Text) button again, the digital teletext screen is displayed.

DTV Menus

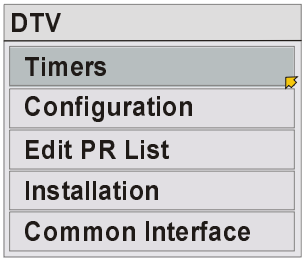
The DTV menu can only be shown when watching Digital terrestrial broadcasting. To display the DTV menu, do the following:

1. Press MENU button.

The menu appears.

2. Choose DIGITAL and press the OK button.

The DTV menu appears.



Timers (DTV Timer Recording)

By setting the timer, you can record a Digital terrestrial broadcasting (DVB-T) programme with a VCR connected to EXT-2 while you are out.

- Before using DTV timer recording, the VCR and TV must be connected correctly. For details, see T-V LINK on page 15.
- When you have a T-V LINK compatible VCR connected to Ext-2, all you need to do is set the TV timer settings and the programme will be recorded.

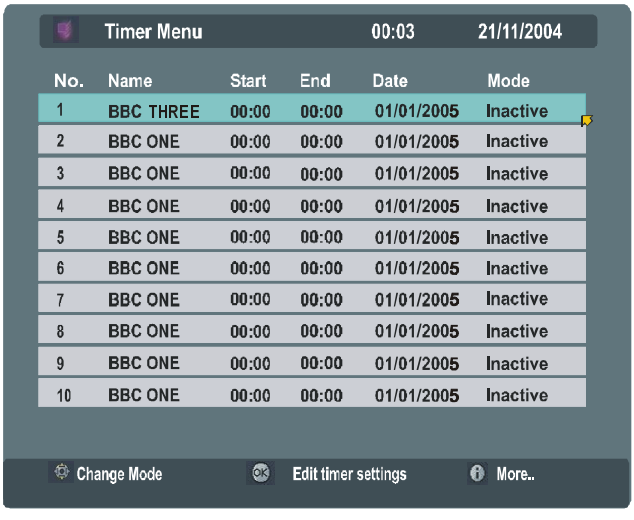
  By using "Direct Rec" of the T-V LINK function, the Direct Rec commands are sent

from the TV to the VCR to automatically start and end the recording. It is not necessary to set the timer on the VCR.

- When your VCR is not T-V LINK compatible, you also need to set the VCR timer settings to match the TV timer settings.
- The recording may not start and stop at exactly the right times for some programmes. It is recommended that you allow some leeway when setting the recording times.
- Provided that the days and times are not the same, you can set up to ten timer settings.
- When subtitles are ON, the subtitles displayed with the broadcast will be recorded. When you do not want to record the subtitles, you need to turn OFF the subtitles settings beforehand (See “Displaying the subtitles” on Page19).
- During DTV timer recording, you are unable to view the DTV menu.

1. Choose Timers and press the OK button.

The TIMER MENU appears.


Timer Menu 00:03 21/11/2004
No. Name Start End Date Mode
1 BBC THREE 00:00 00:00 01/01/2005 Inactive
2 BBC ONE 00:00 00:00 01/01/2005 Inactive
3 BBC ONE 00:00 00:00 01/01/2005 Inactive
4 BBC ONE 00:00 00:00 01/01/2005 Inactive
5 BBC ONE 00:00 00:00 01/01/2005 Inactive
6 BBC ONE 00:00 00:00 01/01/2005 Inactive
7 BBC ONE 00:00 00:00 01/01/2005 Inactive
8 BBC ONE 00:00 00:00 01/01/2005 Inactive
9 BBC ONE 00:00 00:00 01/01/2005 Inactive
10 BBC ONE 00:00 00:00 01/01/2005 Inactive
Change Mode
Edit timer settings
More..

- When the BACK button is pressed, the previous screen is returned to.

2. Press “▲” / “▼” buttons to choose the timer number, and then press the OK button.

The timer setting window appears.

Timer Menu 00:03 21/11/2004
No. Name Start End Date Mode
1 BBC THREE 00:00 00:00 01/01/2005 Inactive
2 BBC ONE 00:00 00:00 01/01/2005 Inactive
3 BBC ONE 00:00 00:00 01/01/2005 Inactive
4 BBC ONE 00:00 00:00 01/01/2005 Inactive
5 BBC ONE 00:00 00:00 01/01/2005 Inactive
6 BBC ONE 00:00 0
7 BBC ONE 00:00 0
8 BBC ONE 00:00 0
9 BBC ONE 00:00 0
10 BBC ONE 00:00 0
Name BBC THREE
Start 00:00
End 00:00
Date 01/01/2004
Mode Once
Select Programme
Confirm Timer
Cancel
More..

3. Use the “▲” / “▼” buttons, number buttons and OK button to set the timer.

- When setting the start time and end time, input 1200 for 12:00 PM, 1500 for 3:00 PM and 0000 for 12:00 AM.

Name:

Use the “◀” / “▶” buttons to choose the channel for which the timer is to be set.

Press the “▼” button.

Start:

Set the timer start time with the number buttons.

- When the “◀” / “▶” buttons are pressed, the input position moves.

Press the “▼” button.

End:

Set the timer end time with the number buttons.

- When the “◀” / “▶” buttons are pressed, the input position moves.

Press the “▼” button.

Date:

Set the date for the timer to work with the numbers.

- When the “◀” / “▶” buttons are pressed, the input position moves.

Press the “▼” button.

Mode:

Use the "◀" / "▶" buttons to choose the timer mode (Once/Daily/Weekly), and then press the **OK** button.

4. Prepare your VCR for recording

When recording on a T-V LINK compatible VCR:

1. Insert the videotape for recording into the VCR and set the recording mode.

2. Make sure the VCR is ready to receive Direct Rec commands from the TV.

3. Make sure VCR timer settings do not coincide with the TV timer settings.

• For details, see your VCR instruction manual.

When recording on a T-V LINK incompatible VCR:

1. Insert the videotape for recording into the VCR and set the recording mode.

2. Set the VCR recording timer settings.

3. Make sure that the start and end time match with the TV timer.

4. Set the VCR to record the signal from the external input that the TV is connected to.

• For details, see your VCR instruction manual.

When you have finished the step 4, you have set the timer.

When you are not watching TV, make sure the TV is in stand by.

WARNING :

Do not turn off the main power. The timer function will not work with the main power switched off.

The TV power lamp begins flashing before the timer start time. When you are watching TV at that time, a message appears on the screen to inform you the timer is about to start.

• When performing timer recording with a T-V LINK compatible device, test the timer recording before you record the programme. There are some T-V LINK compatible recording device that will not correctly receive the Direct Rec command from the TV.

If the recording device does not operate when the recording start time is reached, it means VCR is not receiving the Direct Rec command from the TV. In this case, follow the instructions of "When recording on a T-V LINK incompatible VCR:".

While the timer is in operation:

• You can turn the TV on or off (Stand by).

WARNING: Do not turn off the main power.

• You can watch analogue terrestrial broadcasting channels or the pictures via an Ext terminal.

• Please note that any programme information that appears on the screen, such as when making changes to the Digital terrestrial broadcasting (DVB-T) channel picture, will be superimposed over the picture in the VCR recording.

• When you press the following buttons (ⓘ, AV, MENU, SUBTITLE, GUIDE, ◔, BACK, P∨ / P∧, number buttons) during recording, a message appears asking if you want to stop recording or not. Press **OK** button to stop recording or BLUE button to continue recording.

Cancelling the timer setting

Display the TIMER MENU and press the "▲" / "▼" buttons to choose which timer setting to cancel. Press the "◀" / "▶" buttons so that "Inactive" appears in the Mode column.

Reactivating the cancelled timer setting

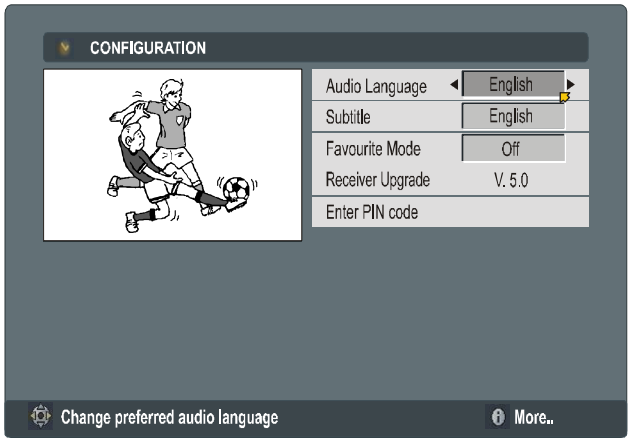
Display the TIMER MENU and press the "▲" / "▼" buttons to choose which timer setting to reactivate. Press the "◀" / "▶" buttons so that "Active" appears in the Mode column.

Configuration

Set the basic setting when watching Digital terrestrial broadcasting (DVB-T).

Choose configuration and press the **OK** button.

CONFIGURATION appears.



- When the BACK button is pressed, the previous screen is returned to. When MENU button is pressed, the menu disappears.
- When the (Information) button is pressed, the help screen appears. When it is pressed again, the previous screen is returned to.

Audio Language

With Digital terrestrial broadcasting (DVB-T), a number of languages can be broadcast at the same time. Choose language you want to listen when watching these broadcasts.

1. Press the "▲" / "▼" buttons and choose Audio Language.
2. Press the "◀" / "▶" buttons and choose the language.

   Language changes every time the button is pressed.

- If the selected language is not broadcast, the default language will be played.

Subtitle Language

With Digital terrestrial broadcasting (DVB-T), a number of subtitles can be broadcast at the same time. Choose the subtitle you want to display when watching these broadcasts.

1. Press the "▲" / "▼" buttons and choose Subtitle.
2. Press the "◀" / "▶" buttons and choose a subtitle language that appears when the SUBTITLE button is pressed.

Favourite Mode

Enable/disable the Edit PR List Favourites settings.

1. Press the "▲" / "▼" buttons and choose Favourite Mode.
2. Press the "◀" / "▶" buttons and choose ON or OFF.

   On:

   The Edit PR List Favourites settings are enabled.

   When the P∨ / P∧ button is pressed, only the channels chosen in the Edit PR List favourites (those with the icon) can be chosen.

   • For details on how to set your favourite channels, see "Setting the favourite channels" on page 25.

   Off:

   The Edit PR List Favourites settings are disabled.

   When the P∨ / P∧ button is pressed, all the channels registered in the Edit PR List can be chosen.

Receiver Upgrade

Set the method to upgrade the Digital terrestrial broadcast (DVB-T) receiver software.

1. Press the "▲" / "▼" buttons and choose Receiver Upgrade, and press the OK button.

The setting window appears.

• The actual version may be different to the Receiver Upgrade version displayed above.

2. Press the "▲" / "▼" buttons and choose Automatic Download, and press the "◀" or "▶" buttons to choose Enable and Disable.

Enable (factory settings):

The Digital terrestrial broadcasting (DVB-T) software is automatically updated every day at 3:00 am. When enabled, the TV also searches for new software whenever it goes to standby.

Disable:

The Digital terrestrial broadcasting (DVB-T) software is not automatically updated.

Manually updating the Digital terrestrial broadcasting (DVB-T) information

Press the "▲" / "▼" buttons and choose Search for New Version, then press the **OK** button.

The Digital terrestrial broadcasting (DVB-T) information is updated.

In the future, there is a possibility that Receiver Update function may also be able to be used to update the Digital terrestrial broadcating (DVB-T) software and add new functions.

Enter PIN code

Choose Enter PIN code to change the PIN code for the Edit PR List menu's "Lock". The PIN code factory setting (how it is set when you purchase the television) is 0000.

1. Press the "▲" / "▼" buttons and choose Enter PIN code, and press the **OK** button.
2. Input the current PIN code.

   When you are making this setting for the first time, input 0000.

   When a PIN code has already been set, enter the correct PIN code.

   The PIN code setting window appears.
3. Press the number buttons to input a new PIN code (password).
4. Input the new PIN code (password) again in the Confirm box.

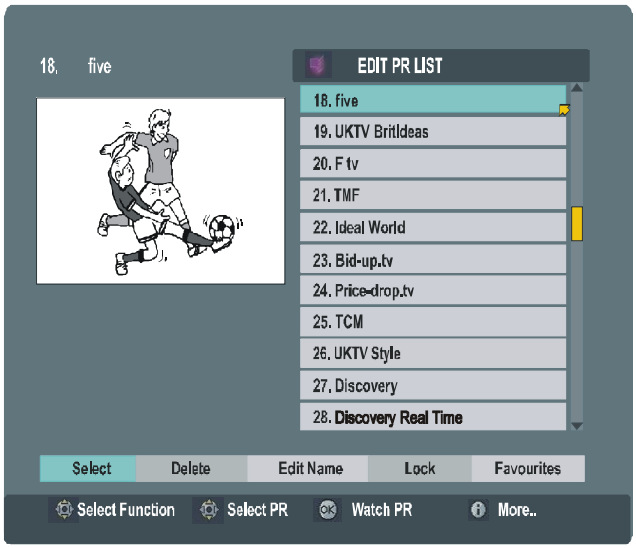
   "Pin code is changed" appears.

   Your newly chosen PIN code is now set. You will now need to use the PIN code (password) you choose. Here to lock or to unlock the Edit PR List's "Lock".

Edit PR List

Choose Edit PR List and press the **OK** button.

EDIT PR LIST appears.



The Edit PR List can be used to do the following:

• delete registered channels

• edit channel names.

• lock channels so that they can not be watched by children.

• set Favourites so that you can easily choose from only the channels you often watch.

• Sometimes you may notice a drop in picture quality while watching your programme in the quarter-screen. This is not a fault.

• When the BACK button is pressed, the previous screen is returned to. When the TV/DTV or MENU button is pressed, the menu disappears.

• When the ℹ (information) button is pressed, the help screen appears. When it is pressed again, the previous screen is returned to.

Here, you can preview any channel stored by the receiver before viewing it full screen. The complete list of channels is displayed in pages of 11 channels at a time, with their channel list number and a favourite channel icon if appropriate.

Choosing a channel

The chosen channel is shown on the quarter-screen.

1. Press the "◀" / "▶" buttons and choose Select on the bar at the bottom of the screen.
2. Press the "▲" / "▼" buttons and choose a channel, and then press the **OK** button.

   The picture of the chosen channel is shown on the quarter-screen.

Deleting a channel

1. Press the "◀" / "▶" buttons and choose Delete on the bar at the bottom of the screen.
2. Press the "▲" / "▼" buttons and choose the channel to be deleted, and then press the OK button.

   The channel deletion confirmation window appears.
3. Choose Yes and press the **OK** button.

   The chosen channel is deleted.

   • If you do not want to delete the chosen channel, choose NO and press the **OK** button.

   • Perform "Installation" (see page 25) to re-register a channel that you have deleted.

Editing a channel name

1. Press the "◀" / "▶" buttons and choose Edit Name on the bar at the bottom of the screen.
2. Press the "▲" / "▼" buttons and choose the channel to be edited, and then press the **OK** button.

   The EDIT window appears.
3. Press the "▲" / "▼" buttons and choose a character, press the "◀" / "▶" buttons to move the cursor and edit the name, and then press the **OK** button.

   The edited channel appears in the Edit PR List.

Locking a channel

When there is a channel you do not want your children to watch, you can lock the channel.

1. Press the "◀" / "▶" buttons and choose Lock on the bar at the bottom of the screen.
2. Press the "▲" / "▼" buttons and choose the channel to be locked, and then press the **OK** button.

   The Enter PIN code input window appears.

3. Press the number buttons to input to correct PIN code.

   If you have not changed the PIN code in the CONFIGURATION menu's "Enter PIN Code" (see page 23), input the PIN code you chose.

   The lock icon appears next to the channel name in the Edit PR List.

   When a locked channel is chosen, the Enter PIN code input window will appear. If the correct PIN code is input, the picture appears.

   • When you forget the PIN code for the "Lock", you can unlock locked channels by performing Automatic Search (see INSTALLATION).

Setting the favourite channels

If only channels that you often watch are set as favourite channels, you can choose from just those channels by pressing **P∨** / **P∧**.

- After setting the favourite channels, check the "Favourite Mode" in "Configuration" (see page 22) is set to ON.

1. Press the "◀" / "▶" buttons and choose Favourites on the bar at the bottom of the screen.
2. Press the "▲" / "▼" buttons and choose the channel to be registered as a favourite channel, and then press the **OK** button.

   The favourite icon (☺) appears on the right side of the chosen channel.

When you leave the Channel List screen, by pressing "MENU" the channel showing on the quarter screen is selected for normal viewing on the whole screen.

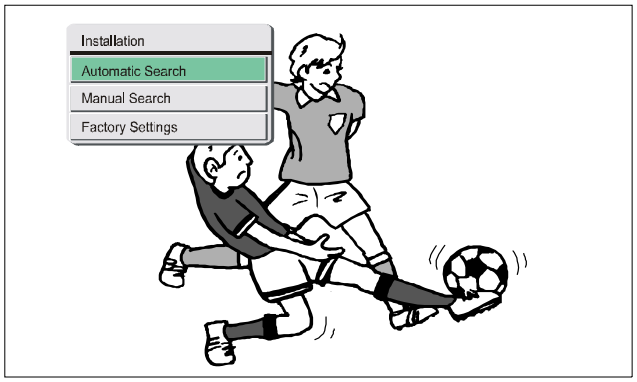
Installation

Although your TV will not lose its settings or stored channels when switched off, you may wish to re-install the programs because you have moved to a different area with different broadcast frequencies, you wish to reinstate a channel previously deleted from the channel list, or you want to watch new channels which have started broadcasting.

Display the DTV Menu and using the "▲" or "▼" buttons, highlight the Installation line and press **OK** to display the Installation Menu.

The Installation menu appears.

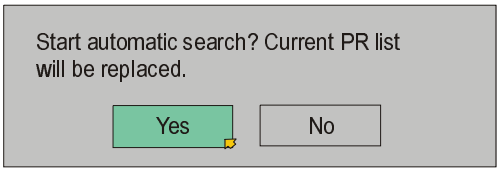
You can either select Factory Settings, effectively resetting the receiver to its factory setting condition, or just search for channels.



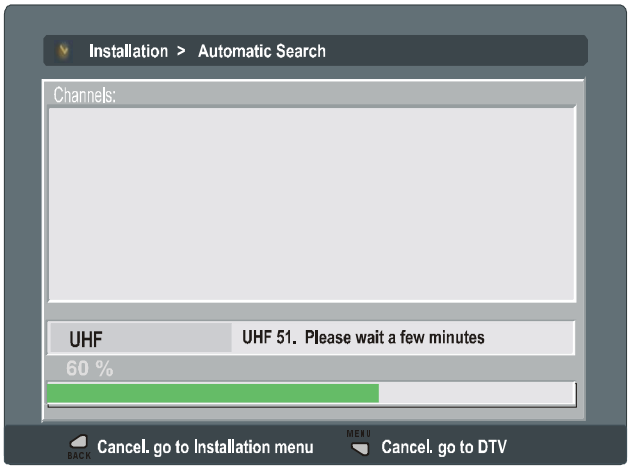
Automatic Search:

The receiver can search for channels automatically (searching all the broadcast frequencies for free-to-air channels).

To perform Automatic search, Select Automatic Search with the "▲" or "▼" buttons and press **OK**. A warning message is displayed.

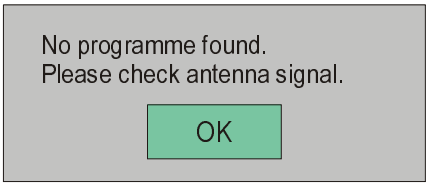


This starts the automatic tuning process and searches through all the available broadcast frequencies for free-to-air channels.

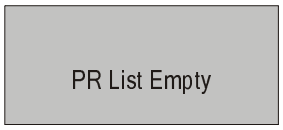


Previous channels will be replaced on automatic search.

If no digital terrestrial television broadcasts are found, the TV will display a message:

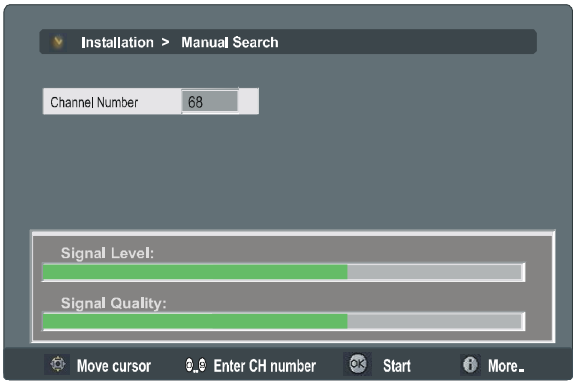


When “OK” button is pressed, following message will appear on the right bottom side of the screen:



Manual Search:

This is for searching for digital channels on a single broadcast frequency. The frequency channel number (21-68) is entered in the box at the top left of the screen and the received signal level and signal quality can be observed on the two bar graphs at the bottom. When **OK** is pressed, the TV searches that frequency and display a list of the channels found.



Hint

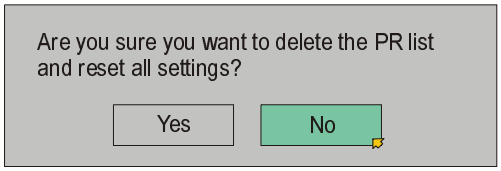
The bar graphs of signal quality and signal level give a good indication of whether any channels are likely to be found. If only the signal level graph shows a high value then it is likely that an analogue channel occupies that broadcast frequency. If the signal quality bar is high as well then it is a digital frequency and digital channels will probably be found.

Again, channels which duplicate those already in the channel list are ignored. However, the manual channel search will find all channels on the broadcast frequency.

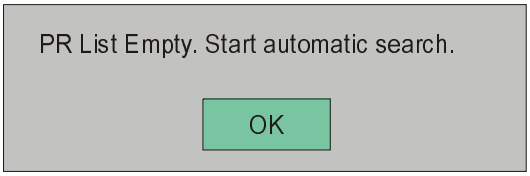
When either search is finished, press the MENU key to return to normal broadcast viewing, to watch the new digital terrestrial television channels found.

Factory Settings:

To reset the TV, highlight the Factory Settings line in the menu and press **OK**. A warning screen is displayed in case of accidental operation.



Highlight the YES button with the “◀” or “▶” key and press **OK** to erase all the channels and settings. A message will be displayed on the screen.



- Press the **OK** button to start the automatic search.
- When the automatic search has finished, the EDIT PR LIST menu appears.

Common Interface

It is required to subscribe to a pay channel company to view the pay channels of the Digital Terrestrial broadcasting.

Obtain the Conditional Access Module (CAM) and the Viewing card by subscribing to a pay channel company, then insert those to the Television using the following procedure.

1. Switch off the TV and unplug from the mains.
2. Insert the CAM, then Viewing Card to the slot that is located in the terminal cover at the left-hand side of the TV (from front view).

- The CAM should be correctly inserted, it is impossible to insert fully if reversed. The CAM or the TV terminal may be damaged if the CAM is forcefully inserted.

3. **Connect the TV to the mains supply, switch on and then wait for few moments until the card is activated.**

- Some CAMs may require the following set up. Please set the CAM by entering the DTV menu, Common Interface then pressing **OK** button. (CAM set up menu is not displayed when it is not required.)

- To see the viewing contract information, press **MENU**, Select DIGITAL and Press **OK**, then Select Common Interface and press **OK**.
- When no module is inserted, "**No CI Module**" appears.
- Refer to the module instruction manual for details of the settings.

Setting The TV

Menu System

Your TV's analogue part has been designed with a menu system to provide an easy manipulation of a multi-function system. The TV is controlled by choosing the commands, which are displayed on the screen.

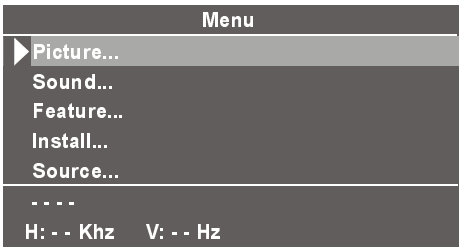
MAIN MENU

Press the "**MENU**" button. The main menu will be displayed in the middle of the screen.

To select a sub-menu use "▲" or "▼" button, and press "◀" or "▶" button or directly press "**OK**" button.

In EXT-1, EXT-2 and EXT-4 modes, main menu appears the same as in TV mode but without Program sub-menu.

In EXT-3 mode, Main Menu appears as follows:



In DIGITAL TV mode, DIGITAL will appear on the Main menu. Install and Program do not appear.

Menu does not disappear automatically if it is left on the screen.

Press "**MENU**" button again to remove menu.

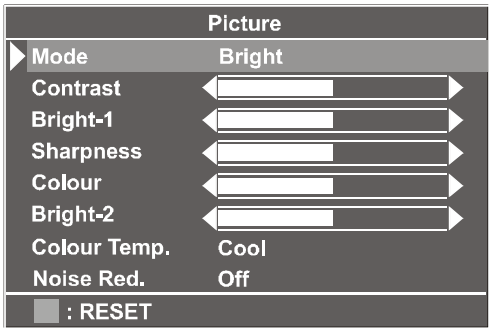
Picture Menu

Press "**MENU**" button, now you are in main menu. In the Main menu, select "**Picture**" using "▲" or "▼" button, then enter the Picture menu by pressing "◀" / "▶" or "**OK**" button.

Setting Mode

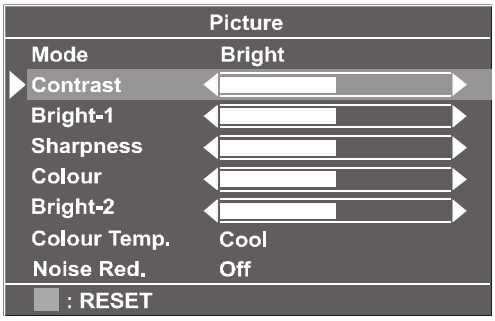
- As you enter the picture menu, Mode will be the first item.
- By pressing "◀" or "▶" button you may choose one of these options:

  Soft, Standard and Bright.



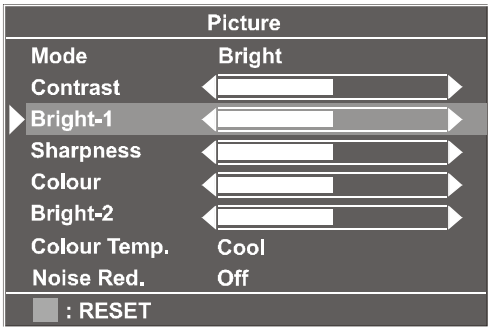
Setting Contrast

- Using "▲" or "▼" button select Contrast.
- Press "▶" button to increase contrast level.
- Press "◀" button to decrease contrast level.



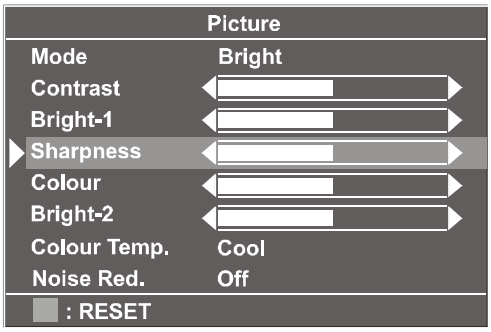
Setting Bright-1

- Using "▲" or "▼" button select Bright-1.
- Press "▶" button to increase brightness.
- Press "◀" button to decrease brightness.



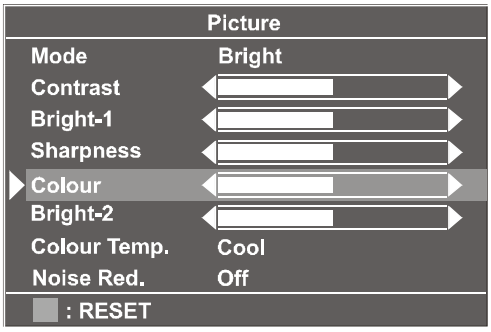
Setting Sharpness

- Using "▲" or "▼" button select Sharpness.
- Press "▶" button to increase sharpness level.
- Press "◀" button to decrease sharpness level.



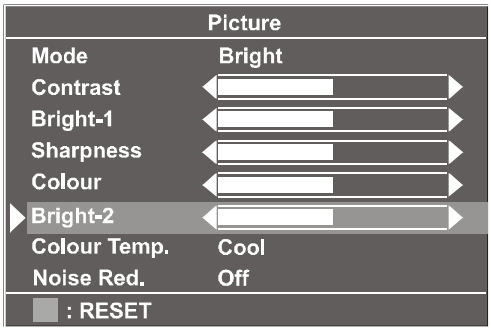
Setting Colour

- Using "▲" or "▼" button select Colour.
- Press "▶" button to increase colour level.
- Press "◀" button to decrease colour level.



Setting Bright-2

- Using"▲" or "▼" button select Bright-2.
- Press "▶" button to increase the back light.
- Press "◀" button to decrease the back light.



Setting Colour Temp.

- Using "▲" or "▼" button select Colour Temp.
- Press "◀" or "▶" button to select "Warm", "Cool" or "Normal".

Setting Noise Reduction

- Using "▲" or "▼" button select Noise Reduction.
- Press "◀" or "▶" button to select Noise Reduction level "**Off**" or "**Minimum**" or "**Medium**" or "**Maximum**".

Note 1:

At low signal level, the changings on the Noise Reduction function are not effective when there is menu on the screen. If the menu is removed, the effect of this function is seen. At normal broadcasting, Noise Reduction changings are effective at once.

Note 2:

At moving pictures, while Noise Reduction is at maximum level, some picture distortions may occur. If Noise Reduction is set to medium or minimum, the picture will improve.

Setting Hue

During Playback NTSC system, this will appear in AV mode only when NTSC video source is applied. Otherwise, HUE option is invisible in Picture menu in TV mode :

- Using "▲" or "▼" button select Hue.
- Press "▶" button to increase hue level.
- Press "◀" button to decrease hue level.

Center value is indicated with one arrow.

Reset

Press BLUE button to reset the picture modes to factory default settings.

To Store the Settings

In the Picture Menu, all settings are stored automatically.

Sound Menu

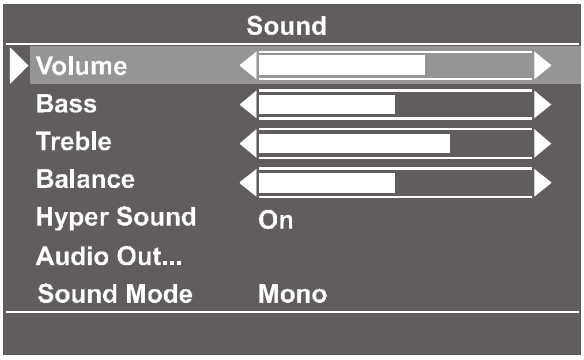
As you enter the main menu, sound will be the second item. In the main menu, select **Sound** using "▲" or "▼" button, then enter the sound menu by pressing "◀" / "▶" or **"OK"** button.

Setting Volume

As you enter the sound menu, Volume will be the first selected option.

- Press "▶" button to increase volume.
- Press "◀" button to decrease volume.

Or you can directly change the volume settings using "◢ **+**" (to increase) or "**-** ◢" (to decrease) button.



Setting Bass Level

- Using "▲" or "▼" button select Bass Level.
- Press "▶" button to increase bass level.
- Press "◀" button to decrease bass level.

Setting Treble Level

- Using "▲" or "▼" button select Treble
- Press "▶" button to increase treble level.
- Press "◀" button to decrease treble level

Setting Balance

It allows adjusting the distribution between the left and right speakers.

- Using "▲" or "▼" button select Balance.
- Press "▶" button to change balance rightward.
- Press "◀" button to change balance leftward.

Hyper Sound

- Using "▲" or "▼" button select Hyper Sound.
- Pressing "◀" or "▶" button will turn on or off this feature.

Pseudo/spatial effect can be turned on or off via the Hyper Sound item in the Sound menu or by remote control. In Mono transmission the left and right channels will be added at left channel and dummy stereo effect will be introduced to end-user.

In stereo transmission it yields a phase difference between left and right channels.

To Change Audio Out Settings

Audio Out is a sub-menu of Sound menu.

Use this settings to adjust volume for audio out terminal which is located at the right side of the TV.

- Using "▲" or "▼" button select Audio Out.
- Press "◀" or "▶" button or directly press "**OK**" button on Audio **Out**, to enter the Audio Out menu.

Audio Out Volume

- As you enter the Audio Out sound menu, Volume will be the only option.
- Press "▶" button to increase volume.
- Press "◀" button to decrease volume.

Selecting Sound Mode

• Using "▲" or "▼" button select Sound Mode.

• Press "◀" or "▶" button to change Sound Mode.

You can choose **Mono**, **Stereo** or **Dual (I-II)** mode, only if the selected channel supports that mode.

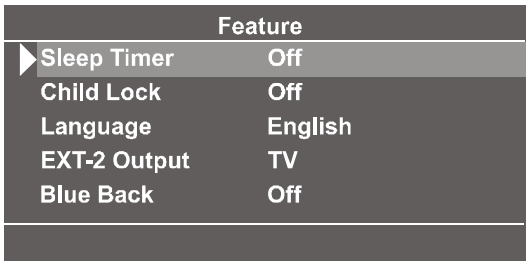
In case of bilingual broadcast (Dual Sound), you can select original or dubbed language using mode option. So when somebody listens to the original language from the loudspeakers, somebody else can listen to the dubbed language from headphone.

To Store The Settings

In the Sound Menu, all settings are stored automatically.

Feature Menu

Press "**MENU**" button, now you are in mainmenu. In the main menu, select **Feature** using "▲" or "▼" button. Then enter the Feature menu by pressing "◀" / "▶" or "**OK**" button.



Sleep Timer

The Sleep Timer is used to turn the TV off after a defined period of time after selecting this item. The timer can be programmed between Off and 120 minutes in steps of 10 minutes. (Off, 010, 020, 030, 040, ... , 120)

If sleep timer is activated, at the end of the selected time, the TV goes automatically to stand-by mode.

Child Lock

You can use this feature to prevent children turning the TV on/off or changing programmes or adjustments etc. without remote control.

• Using "▲" or "▼" button select Child Lock.

• Press "◀" / "▶" button to select Child Lock On or Off .

The **Child Lock** feature can be set **On** or **Off** by "◀" / "▶" button. When **Off** is selected, there will be no difference in the operation of your TV. When **On** is selected, the TV can only be controlled by the remote control. In this case the control panel buttons except "⏻" button on the right side of the TV will not work.

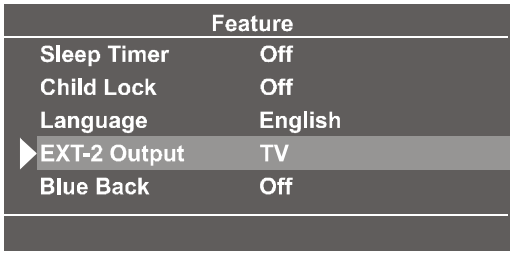
Selecting Menu Language

• Using "▲" or "▼" button select Language.

• Press "◀" or "▶" button to select menu language.

EXT-2 Output

From EXT-2 Output; TV, EXT-1, EXT-4 or DIGITAL can be given. These modes can be chosen by pressing "◀" or "▶" button on "**EXT-2 OUTPUT**".



Blue Back (During No Signal)

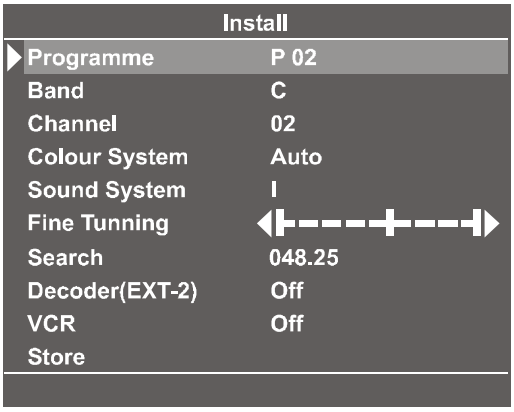
The Blue Back Feature can be set by "▲" or "▼" button to either On or Off.

To Store Settings

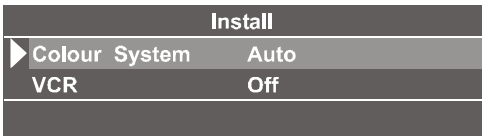
In Feature menu all settings are stored automatically.

Install Menu

Press "**MENU**" button, now you are in main menu. In the main menu, select "**Install**" using "▲" or "▼" button. Then enter the Install menu by pressing "◀" / "▶" or "**OK**" button.



In EXT mode, Install menu appears like this:



You can change only Colour system and VCR.

Selecting Programme

- Using "▲" or "▼" button select **Programme**.
- To select programme number, you can use "◀" / "▶" button or Digit Buttons.

Selecting Band

Band, can be chosen either,

- "C" or "S" by "◀" or "▶" button.

Selecting Channel

Channel can be changed by "◀" or "▶" button or by Digit Buttons.

Selecting Colour System

Using "◀" or "▶" button on **Colour System**, you can change the colour system to **PAL, SECAM** or **Auto**.

Note: In EXT mode, you can choose NTSC 3.58 and NTSC 4.43 as well.

Selecting Sound System

Using "◀" or "▶" button on **Sound System**, you can change the standard to **BG, DK, I, L, Lp**.

Selecting Fine Tuning

You can use the Fine Tuning process for fine adjustment (after coarse adjustment), if you are not happy about the image on the screen.

Use "◀" or "▶" button on **Fine Tuning** item, until getting the best image on the screen.

Selecting Search

To start the search process, press "▶" button for forward search or "◀" button for backward search. If a signal is found or reaches to end of the band after searching, press "◀" or "▶" buttons to continue search process. To stop the search process when you want, press "◀" or "▶" buttons at any time.

Decoder (EXT-2)

You can use this mode to connect any decoder to your TV.

- Press the "◀" or "▶" buttons to set it "On" or "Off".

When you select Decoder (EXT-2) "On", EXT-2 output will be chosen as TV mode only and any scrambled channels will be unscrambled through decoder connected your TV via EXT-2 output.

Setting VCR (Video Cassette Recorder) Mode

- This item can be seen in **TV, EXT-1**, **EXT-2**, **EXT-2S**, **EXT-3**, **EXT-4** and **EXT-4S** modes.
- If you want to watch a **VCR** source from one of these modes, then it will be better to set **VCR** mode "**On**". For this, while the cursor is on this item press the "◀" or "▶" buttons to set it "**On**".
- If you want to watch a **DVD**, then you must set this item "off"; because **DVD** is not a source like a **VCR** and to see the picture better, you must set the **VCR** mode "**Off**".

To Store Settings

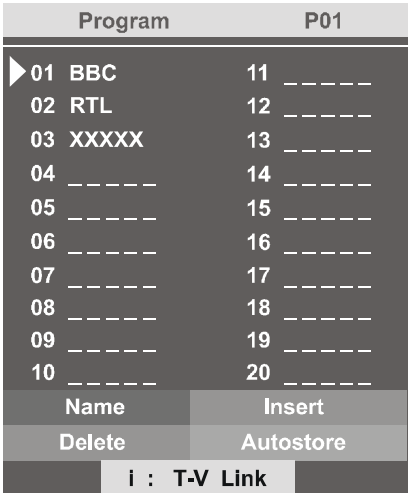
- Press "◀" / "▶" or "**OK**" button on **Store** option to store Install menu settings.

• After stored, T-V LINK menu will appear. If you do not need to do T-V LINK, select Cancel and press "▶" or "**OK**" button to exit the menu.

Program Menu

Press "**MENU**" button, now you are in main menu. In the main menu, select "**Program**" using "▲" or "▼" button. Then enter the Programme menu by pressing "◀" / "▶" or "**OK**" button.

Note: There is no Program menu in any EXT modes.



Program Menu is used to delete a channel, to change the programme number of a channel, to give a channel name to a channel, and to start the A.P.S (Autostore) function.

To choose a channel in the PROGRAM menu

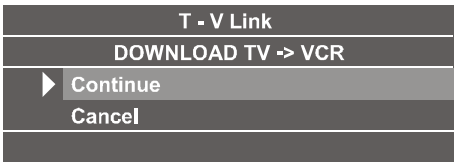
Press "▲" / "▼" / "◀" / "▶" button. The programme number that you choose is high-lighted in the Program.

Caution:

Using "Delete" or "Insert" function rewrite the current channel list in the Program menu. Therefore, the programme numbers of some of channels will change.

When you complete the settings of Program menu:

If you have a T-V LINK compatible VCR, press "ⓘ" button to display the T-V LINK menu. then follow the operating procedure "Downloading the data to VCR".



If you do not have a T-V LINK compatible VCR, select Cancel and press "▶" or "**OK**" button to exit the menu.

To give a channel name (Name):

1. Choose the channel you want to give a channel name.
2. Press the RED button to enter the Name mode.
3. Press "◀" or "▶" button to choose the position,and press "▲" or "▼" button to choose each character of channel name.
4. Press the RED button to store the channel name.

• To cancel the Name mode, press the BLUE button.

To delete a channel (Delete):

1. Choose the channel you want to delete.
2. Press the YELLOW button to enter the Delete mode.
3. Press the YELLOW button to delete it.

• To cancel the Delete mode, press the BLUE button.

To change the programme number of a channel (Insert)

1. Choose the channel you want to change the programme number.
2. Press the GREEN button to enter the Insert mode.
3. Press "▲" / "▼" / "◀" / "▶" button to choose new programme number.
4. Press the GREEN button to Insert the channel to the chosen programme number.

Autostore:

To enter Autostore menu, press the BLUE button. To learn the features of this function see "**Autostore**" below.

Autostore, searches and stores all channels

automatically on your TV, according to the transmission of programme systems in your area.

First of all choose the "**Country**" by using "◀" or "▶" button. Then press the Red button to start Autostore.

After Autostore is finalized, a programme list will appear on the screen. In the program list you will see the programme numbers and names assigned to the programmes.

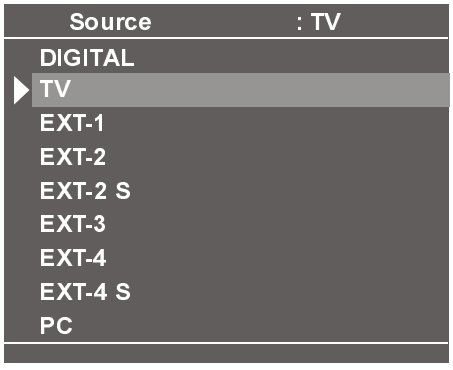
If you do not accept the locations and/or the programme names of programmes, you can change them in Programme menu.

Source Menu

You can switch your TV to EXT modes by pressing directly to "**AV**" button or by selecting in source menu from the main menu.

While in EXT mode, you can also switch your TV to TV or other EXT modes by selecting in source menu from the main menu.

In main menu, firstly use "▲" or "▼" button then use "◀" / "▶" or "**OK**" button to enter Source menu. In source menu, move the cursor by "▲" or "▼" button and then press "**OK**" button or "◀" / "▶" buttons when the cursor is on the required item. The selected mode comes automatically on the screen.



Other Features

TV Status

Programme Number, **Programme Name** (or **EXT**), (they are displayed on the upper left of the screen). The **sound indicator** is displayed with them too. They are displayed after programme change for 3 seconds.

Sound Indicator

The alternatives of the indicator are Mono, Stereo, Dual I and Dual II. This indicator is displayed under the programme number indicator on the screen.

Mono

In Mono broadcast or in forced-mono (for stereo broadcast).

Stereo

In Stereo broadcast.

Dual I

If dual broadcast detected. Dual I is selected in default and also can be selected after Dual II by Remote Control.

Dual II

If Dual II selected by Remote Control.

Hyper Sound

By selecting Hyper Sound in sound menu or by pressing the "⟲" button on your remote control, Pseudo/Spatial effect can be turned on or off. In Mono transmission the left and right channels will be added at left channel and dummy stereo effect will introduced to end-user.

In stereo transmission it yields a phase difference between left and right channels.

Mute Indicator

It is placed in the upper middle of the screen when enabled, and it stays there until it is disabled.

To cancel mute, there are two alternatives; the first one is by pressing the "🔇" button,

this volume is set to the preceding value, and the second one is increasing or decreasing the volume level.

No-Signal Detection (TV mode)

If no valid signal detected, it takes 5 minutes to switch to the Stand-By mode unless any signal detected or any Remote Control command is accessed.

After a Remote Control command (if No-Signal Timer is active) the timer stops and if no signal detected again the timer is initialized to 5 minutes and starts 3 seconds later again to count down.

It is not valid in EXT modes.

Volume Bar

It is displayed in the lower middle of the screen. When a volume command is received (pressing "◢ **+**" or "◢ **-**" by Remote Control or Control panel at the top of the TV) and no menu is active, it stays on the screen for 3 seconds, after the last volume command or until another command is received in between.

EXT Modes

By pressing the "**AV**" button you can switch your TV to EXT modes (except being in Teletext). Pressing this button consecutively will switch the TV in one of the optional EXT modes: **EXT-1, EXT-2, EXT-2 S, EXT-3, EXT-4, EXT-4 S** and **PC**.

In order to quit the EXT mode press any digit buttons or "**P**﹀" or "**P**﹀"

Zoom Modes

Zoom mode can be changed by pressing **Zoom** button. You can change the screen size according to the picture aspect ratio. Select the optimum one from the following **ZOOM** modes.

AUTO:

When a **WSS (Wide Screen Signalling)** signal, which shows the aspect ratio of the picture, is included in the broadcast signal or the signal from an external device, the TV automatically changes the **ZOOM** mode to **16:9 ZOOM** mode **PANORAMIC** or **FULL** mode according to the **WSS** signal.

- When the **AUTO** mode does not function correctly due to poor **WSS** signal quality or when you want to change the **ZOOM** mode, change to another **ZOOM** mode manually.

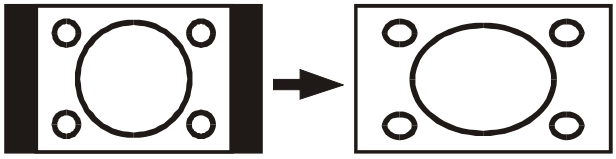
Using the different screen formats

Press the ZOOM button to select the different modes: Auto, Full, Regular, Panoramic,14:9 Zoom,16:9 Zoom,16:9 Zoom Subtitle modes. In some modes, press "▲" or "▼" button to move the picture up or down.

Note: *You can only choose REGULAR and FULL in PC mode.*

FULL:

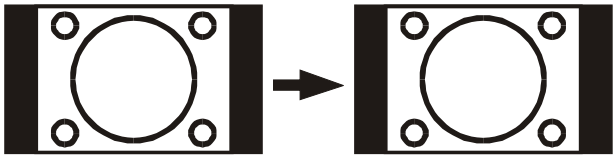
This uniformly stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the wide TV screen.



- For 16:9 aspect ratio pictures that have been squeezed into a normal picture (4:3 aspect ratio), use the **FULL** mode to restore the picture to its original shape.

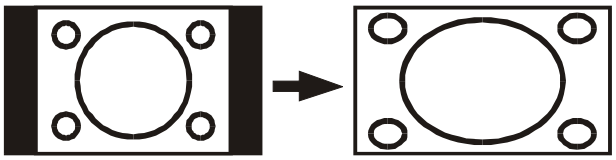
REGULAR:

Use to view a normal picture (4:3 aspect ratio) as this is its original shape.



PANORAMIC:

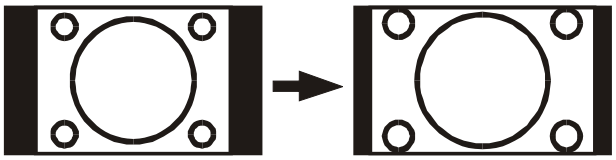
This stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the screen, without making the picture appear unnatural.



The top and bottom of the picture are slightly cut off.

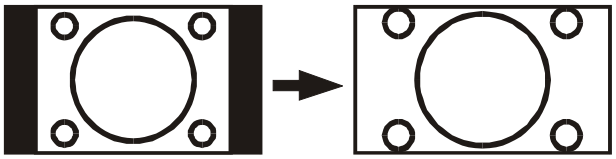
14:9 ZOOM:

This zooms up the wide picture (14:9 aspect ratio) to the upper and lower limits of the screen.



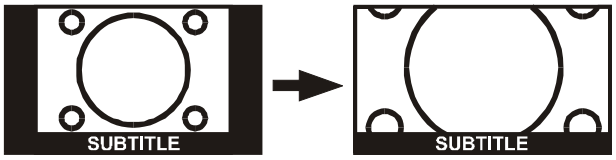
16:9 ZOOM:

This zooms up the wide picture (16:9 aspect ratio) to the full screen.



16:9 ZOOM SUBTITLE:

This zooms up the wide picture (16:9 aspect ratio) with subtitles to the full screen.



Note:

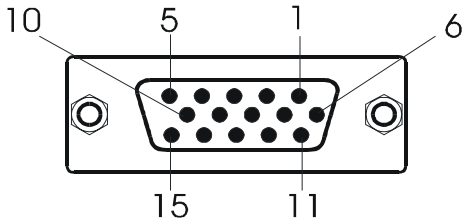
- For 14:9Zoom, 16:9Zoom, 16:9Zoom Subtitle, top and bottom of DTV menu and OSD will be cut off.
- To enjoy with recommended aspect ratio, please set Zoom size to Auto.

PC Mode

Installation

- Power off both Computer and the TV before making any connections.
- Set your PC's resolution correctly before connecting to the TV. See the table in **page 43** for supported modes.
- Use a D-SUB cable to connect the TV's PC input to the computer's RGB output terminal. If you want to listen to the sound from the computer, use an audio cable to connect the PC AUDIO IN to the computer's sound output terminal.

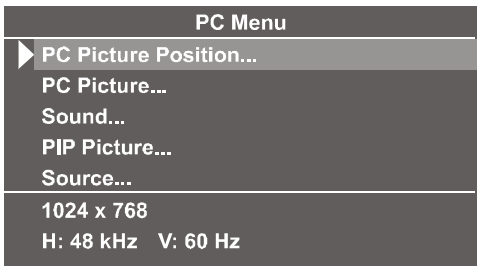
15 Pin Mini D-Sub Connector



- Tighten the screws of the Display cable until the connectors are fastened securely (finger-tighten only).

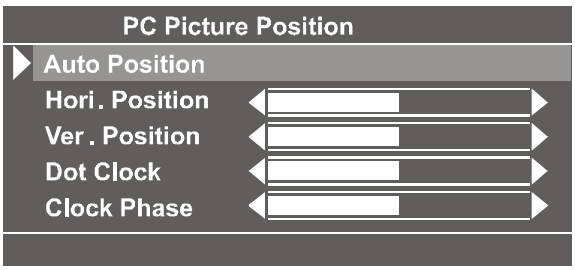
Main Menu in PC mode:

Enter the main menu by pressing the "**MENU**" button on the remote control.



PC Picture Position Menu:

In the Main menu, select "**PC Picture Position**" using "▲" or "▼" button, then enter the menu by pressing "◀" / "▶" or "**OK**" buttons.



Auto Position

If you shift the picture horizontally or vertically to an unwanted position, use this item to put the picture into correct place automatically.

• Select Auto position item by using "▲" or "▼" buttons.

• Press "**OK**" button.

• Press "**MENU**" button or "**BACK**" button to store the value.

Warning: Auto position adjustment recommended to be done with the full screen image for the proper adjustment.

Horizontal Position

This item shifts the image horizontally to right hand side or left hand side of the screen.

• Select **Hor. Position** item by using "▲" or "▼" button.

• Use "◀" or "▶" button to adjust the value.

• Press "**MENU**" button or "**BACK**" button to store the value.

Vertical Position

This item shifts the image vertically towards the top or bottom of the screen.

• Select **Ver. Position** item by using "▲" or "▼" button.

• Use "◀" or "▶" button to adjust the value.

• Press "**MENU**" button or "**BACK**" button to store the value.

Dot Clock

Dot Clock adjustments correct interference that appear as vertical banding in dot intensive presentations like spreadsheets or paragraphs or text in smaller fonts.

• Use "◀" or "▶" button to adjust the value.

Clock Phase

Depending on the resolution and scan frequency that you input to the TV Set, you may see a muddy or noisy picture on the screen. In such a case you can use this item to get a clear picture by trial and error method.

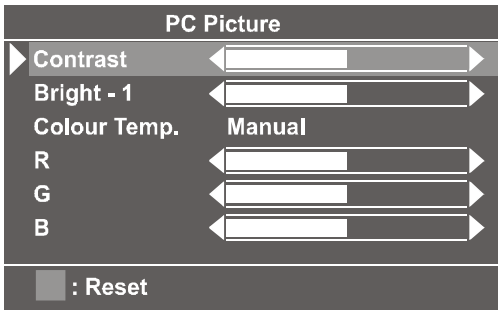
• Use "◀" or "▶" button to adjust the value.

PC Picture Menu

In the Main menu, select "**PC Picture**" using "▲" or "▼" button, then enter the PC Picture menu by pressing "◀" / "▶" or "**OK**" buttons.

Contrast, Bright-1 and Colour Temperature adjustments in this menu are identical to adjustments defined in TV picture menu.

R, G, and B adjust the TV image colour in PC mode. You can change the TV colour to your desired colour: R (Red), G (Green), B (Blue)



Sound Menu

In the main menu select "**Sound**" using "▲" or "▼" button then enter the Sound menu by pressing "◀" / "▶" or "**OK**" buttons.

The items in this menu are described at Sound menu starting **page 29**.

PIP Picture

In the Main menu, select "**PIP Picture**" using "▲" or "▼" button, then enter the PIP Picture menu by pressing "◀" / "▶" or "**OK**" buttons.

This menu is displayed when PIP is displayed on the screen. Otherwise "PIP No Signal" message will be displayed at the bottom of menu.

PIP picture is displayed on the screen by "" button.

Contrast, Bright-1, Colour and Sharpness are described at Picture menu on **page 27**.

Setting PIP Size

• Using "▲" or "▼" button select PIP Size.

• Press "◀" or "▶" button to change PIP size.

Two different PIP sizes are available.

Setting PIP Position

• Using "▲" or "▼" button select PIP Position.

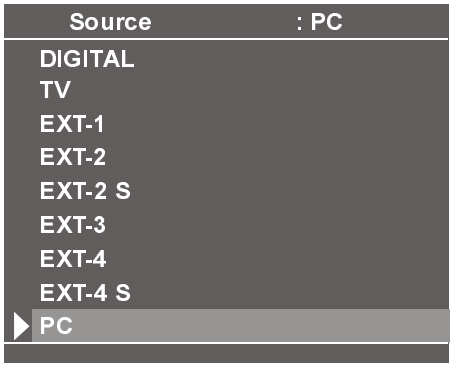
• Press "◀" or "▶" button to change PIP position.

There are four different PIP positions.

Programme in the PIP window can be changed by "P∨ / P∧" , digit buttons or AV button. All EXT modes (Except EXT-3) are also available in PIP window. PIP window is removed from the screen by "◔" button.

Source Menu

In the Main menu, select "**Source**" using "▲" or "▼" button, then enter the Source menu by pressing "◀" / "▶" or "**OK**" buttons.



Select the available sources of **DIGITAL, TV, EXT-1, EXT-2, EXT-2 S, EXT-3, EXT-4, EXT-4S** or **PC** using "▲" or "▼" button and by pressing "◀" / "▶" or "**OK**" buttons.

Sound in PC mode

• Connect the PC's Audio output to the TV's **PC Audio In** socket with an audio cable.

• On your remote control,using "♪" button to select sound source from **TV, EXT-1, EXT-2, EXT-3, EXT-4, PC** and **DIGITAL** options.

• When PIP is displayed on the screen, "♪" button allows you to switch sound between PC and selected PIP source.

No-Signal and Out Of Range Detection (PC mode)

In PC Mode,as no menu is displayed,in case that there is no PC input to the TV, it is displayed an OSD message:

No input signal detected

then the power lamp turns to orange and PC will switch to PC standby mode. Press AV button, digit buttons or **"P∨" / "P∧"** buttons to exit standby mode.

In PC Mode, if the resolution and the vertical frequency is not supported by the concept, it is displayed an OSD message:

Signal out of range

Analogue Teletext

Teletext is an information system that displays text on your TV screen. Using the Teletext information system you can view a page of information on a subject that is available in the list of contents (index).

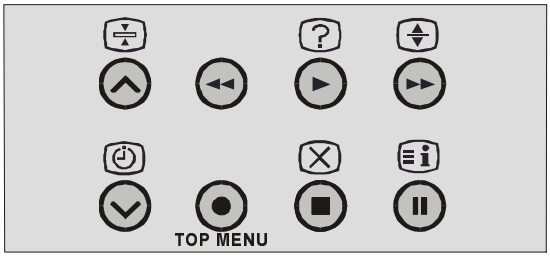
On screen display is not available in text mode.

Contrast, brightness or colour control is not available, but volume control is available in text mode.

To operate Teletext

• Select a TV station on which Teletext is being transmitted.

• Press (TELETEXT) "▤" button. Usually the list of contents (index) is displayed on the screen.



To select a page of Teletext

• Press the appropriate digit buttons for the required Teletext page number.

The selected page number is displayed at the top left corner of the screen. The Teletext page counter searches until the selected page number is located, so that the desired page is displayed on the screen.

• Press "P∧" button to move the Teletext screen forward one page at a time.

• Press "P∨" button to move the Teletext screen backward one page at a time.

To Select Index Page

• To select the page number of the index (generally page 100), press "i" button.

Searching for a teletext page while watching TV

• In the Teletext mode pressing "⊠" button will switch the screen to the TV mode. In the TV mode enter a page number using digit buttons. As you enter last digit of page number, "≡" sign will replace the page number and flash until the entered page number is found. Then the page number will replace "≡" sign again. Now you can display this teletext page pressing "⊠" button.

To Select Double Height Text

• Press "⇕" button for the top half of the information page to be displayed in double height text.

• Press "⇕" button again for the bottom half of the information page to be displayed in double height text.

• Press "⇕" button once more for the full page of normal height text.

To Reveal "concealed" Information

• Pressing "?" button once will reveal answers on a quiz or games page.

• Pressing "?" button again will conceal the revealed answers.

To Stop Automatic Page Change

The teletext page you have selected may contain more information than what is on the screen; the rest of the information will be displayed after a period of time.

• Press "⇕" button to stop the automatic page change.

• Press "⇕" button again to allow the next page to be displayed.

To Select a Subcode Page

Subcode pages are subsections of long Teletext pages that can only be displayed on the screen one section at a time.

• Select the required Teletext page.

• Press "⏻" button.

• Select the required subcode page number by pressing four digit buttons (e.g. 0001).

• If the selected subcode page is not displayed in a short time, press "⊠" button. TV programme will be displayed on the screen.

• Teletext page number will be displayed on the upper left corner of the screen when the selected page is found.

• Press "⊠" button to display the selected Teletext page.

To exit Teletext

• Press "≡" button. The screen will switch to TV mode.

Fastext and Toptext

Your TV supports the 7 page Teletext system. When the page number of any of the 7 pages in memory is entered, the system will not search for the requested page; instead it will display the page automatically.

• Press "P∧" button to move the Teletext screen forward one page at a time.

• Press "P∨" button to move the Teletext screen backward one page at a time.

For Fastext and Toptext

The subject-heading for the information may have a particular colour.

• Press an appropriate **RED**, **GREEN**, **YELLOW** or **BLUE** button in order to reach the relevant page quickly.

For TOPTEXT

If Toptext transmission is present, colour coded buttons will appear in status row.

If Toptext transmission is not present, status row will not appear.

In Toptext mode the "P∧" or "P∨" commands will request the next or previous page respectively. If Toptext transmission is not available, in case of operation of these commands, wraparound occurs. For example page 100 appears to be one greater than page 199.

Peripheral Equipment Connections

There is a wide range of audio and video equipment that can be connected to your TV.

Connection diagrams at the end of this section show you where the different equipment should be connected at the back side of the TV.

Via the Euroconnector

Your TV set has 2 Euroconnector sockets. If you want to connect peripherals (e.g. video, decoder, etc.) which have Euroconnectors, to your TV, use **EXT-1 or EXT-2** input.

If an external device is connected via Euroconnector sockets TV is switched to AV mode automatically. In this case if both sockets are connected, **SCART1** has the precedence.

T-V LINK compatible VCR

Be sure to connect the T-V LINK compatible VCR to the **EXT.2** terminal. If not, the T-V LINK function will not work properly.

• When connecting a T-V LINK compatible VCR to the EXT.2 terminal, be sure to connect the decoder to the VCR. If not, the **T-V LINK** function may not work properly. And then set the **Decoder (EXT-2)** function for the channel to **ON** to unscramble a scrambled channel.

RGB mode

If an equipment can output the **RGB** signals, connect it to the **EXT-1** or **EXT-2** terminal.

EXT-2 S Mode

If the equipment connected to your TV set supports S-Video (Y/C) output from Euroconnector, you can have a better picture quality by selecting **EXT-2 S** mode and connecting your equipment to the **EXT.2 (EXT-2 S)** terminal of TV. See your equipment's booklet to check if your equipment has such feature.

Via the RCA jacks

If you have an equipment (such as a Camcorder) which has the RCA jacks, connect it to the **EXT-4** terminal with the video and audio cables.

If you have a device which outputs component video (Y/Pb/Pr), connect it to the **EXT-3** terminal with a component video cable and an audio cable.

Via the ANT (aerial) socket

If your equipment does not have an Euroconnector or RCA jacks, connect it to the TV with an aerial cable. For details, see the manual provided with the equipment.

• To store the test signal that comes from the equipment, see "**Install Menu**" on **page 30** and store it to the program number 0. You can watch images from that equipment to select the program number which you stored the test signal.

Decoder

Cable TV offers you a wide choice of programmes. Most of them are free, others are to be paid for by the viewer. This means that you will need to subscribe to the broadcasting organisation whose programmes you wish to receive. This organisation will

supply you a corresponding decoder unit to allow the programmes to be unscrambled.

For further information ask your dealer. See also the booklet supplied with your decoder.

Connect a decoder with an aerial socket to the TV

• Connect the aerial cable.

Connect a decoder without an aerial socket to the TV

• Connect the decoder to your TV with a eurocable (RCA Jack Cable) to **EXTERNAL** (RCA Jack). When your decoder has a Euroconnector / RCA Jack you can obtain better picture quality if you connect a eurocable (RCA Jack Cable) to **EXTERNAL** (RCA Jack).

TV and Video Recorder (VCR)

• Connect the Video Recorder to the ANT (antenna input) socket of the TV with the aerial cable.
• Connect the Video Recorder to the **EXT-1** or **EXT-2** terminal with the SCART cable, or connect it to the **EXT-4** terminal with the audio and video cables.

NTSC Playback

Connect a NTSC video recorder to a terminal. Then press "**AV**" button to select the corresponding AV mode.

NTSC 3.58/4.43 system is detected automatically in AV mode.

Camera and Camcorder

To connect to the EXT-4 terminal

Connect your camera or camcorder at the back side of your TV.

• Connect your equipment to the TV via **VIDEO** (yellow), **AUDIO R** (red) and **AUDIO L** (white) inputs. You should connect the jacks to the input in the same colour.

Connect the decoder to the video recorder

Some video recorders have a special euro-connector for decoder.

• Connect a eurocable to the euroconnector of your decoder and to the special euroconnector of your video recorder. See also the handbook of your video recorder.
• To connect your video recorder to the TV, see TV and Video Recorder section.

If you want to connect more equipment to your TV, consult your dealer.

Connecting Headphones

Use the stereo headphone socket on the right side of your TV, to connect headphones.

Connecting the PC

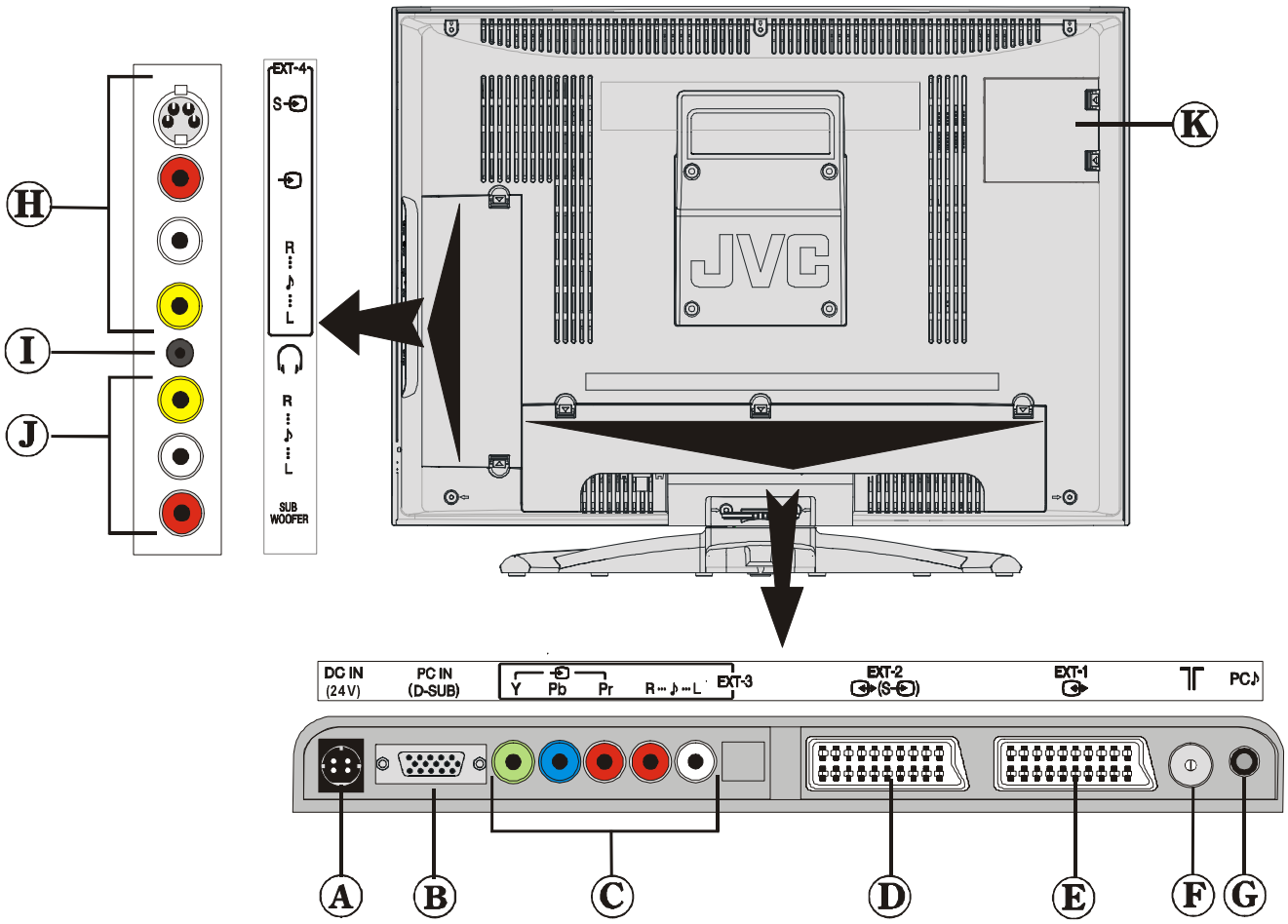
Connect PC monitor with 15-pin PC cable to the 15-pin connector on the rear of the computer. For detail installation procedure see **Installation** in PC mode.

To connect to S-Video input

Connect your camera or camcorder at the back side of your TV.

• Connect your equipment to the TV via S-Video input at the back side by using S-Video cables.

Peripheral Equipment Connections



Ⓐ DC IN

Ⓑ PC INPUT

Ⓒ EXT-3 — Y, Pb, Pr, Component Audio In R, Component Audio In L

Ⓓ EXT-2

Ⓔ EXT-1

Ⓕ ANTENNA

Ⓖ PC AUDIO IN

Ⓗ EXT-4 — S-Video In, Video In, Audio R, Audio L

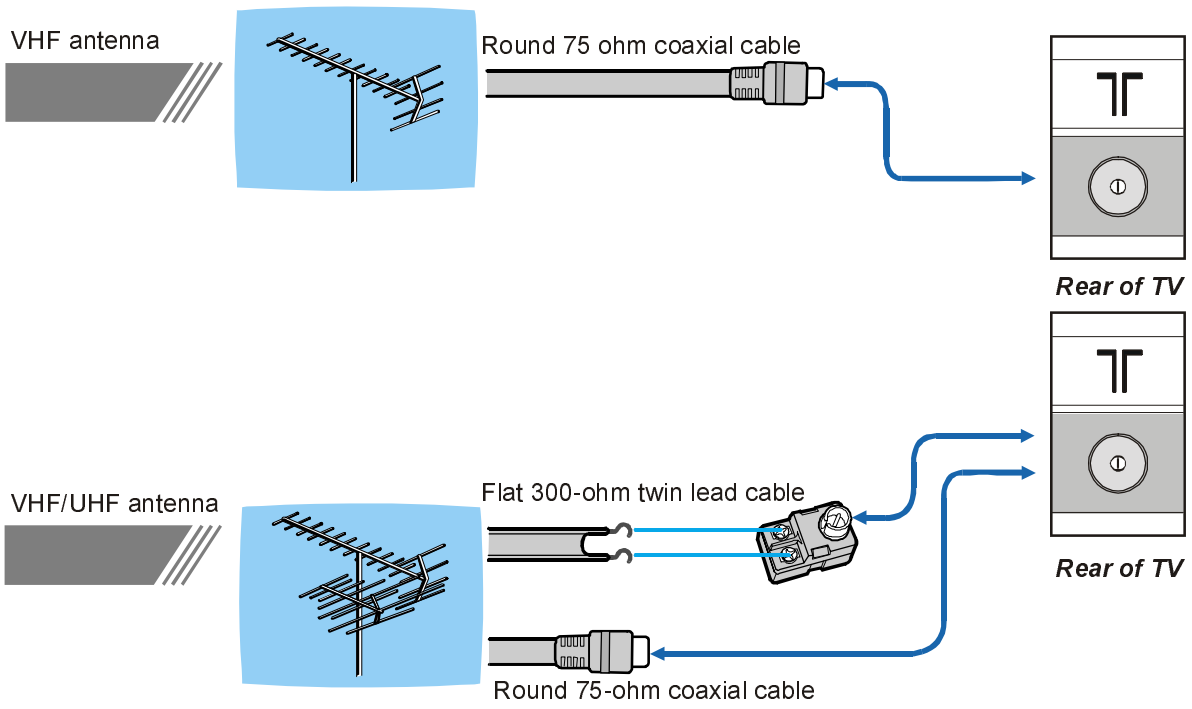
Ⓘ HEADPHONE

Ⓙ AUDIO OUT TERMINAL — Audio R, Audio L, Subwoofer Out

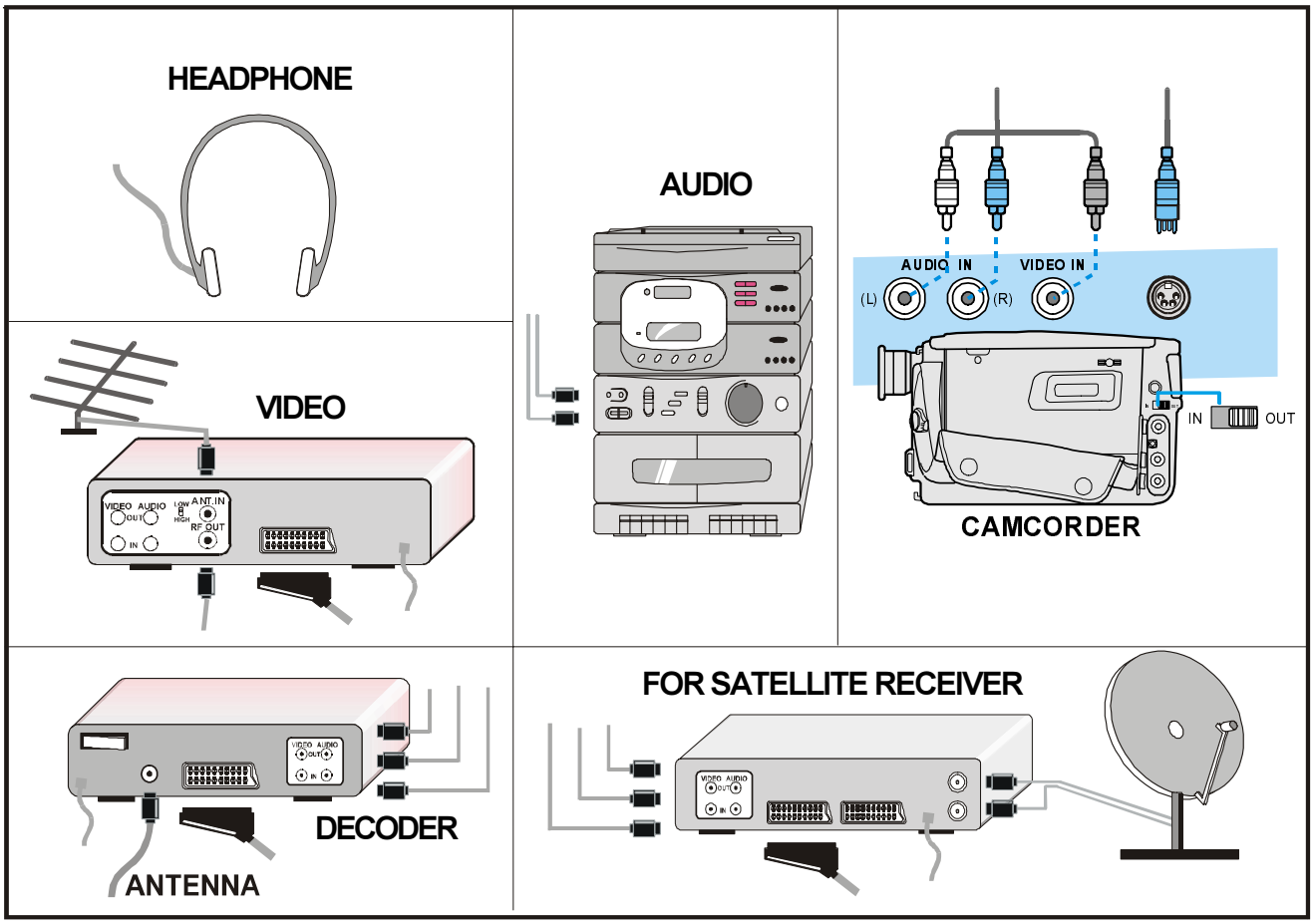
Ⓚ CARD SLOT

Antenna Connections

Outdoor Antenna Connections



Peripheral Equipment Connections



PC Input Typical Display Modes

The display has a maximum resolution of 1360x768, vertical sync. frequency range of 50-75 Hz and a horizontal sync. frequency range of 30-69 KHz.

The following table is an illustration of some of the typical video display modes.

Mode	Resolution		Frequency	
	Horizontal	Vertical	Hor. (kHz)	Ver. (Hz)
1	640	400	31.5	60
2	640	400	31.5	70
3	640	480	31.5	60
4	640	480	37.9	72
5	640	480	37.5	75
6	720	400	31.5	70
7	800	600	35.2	56
8	800	600	37.9	60
9	800	600	48.1	72
10	800	600	46.9	75
11	1024	768	48.4	60
12	1024	768	56.5	70
13	1024	768	60.0	75
14	1280	720	44.6	60
15	1360	768	47.7	60

The native resolution of the TFT-LCD Panel is 1366 x 768. Therefore using Mode 15 is advised to get the best PC input display quality.

Tips

Can not turn the TV on?

Check that TV/VCR/DVD switch is set to TV position.

TV may go to stand-by mode when you turn the TV on soon after you turn the TV off. If you can turn the TV on again, it is not a problem.

Can not turn the TV off?

Check that TV/VCR/DVD switch is set to TV position.

Care of the Screen

Clean the screen with a slightly damp, soft cloth. Do not use abrasive solvents as they may damage the TV screen coating layer.

Colours of image on screen are abnormal

Have you selected the correct TV system? Is your TV set or house aerial located too close to the loudspeakers, non-earthed audio equipment or neon lights, etc. ?

Mountains or high buildings can cause double pictures or ghost images. Sometimes you can improve the picture quality by changing the direction of the aerial.

Is the picture or Teletext unrecognisable? Check if you have entered the correct frequency.

The picture quality may degrade when two peripherals are connected to the TV at the same time. In such a case, disconnect one of the peripherals.

No Image on Display Screen

Is the aerial connected properly? Are the plugs connected tightly to the aerial socket? Is the aerial cable damaged? Are suitable plugs used to connect the aerial? If you are in doubt, consult your dealer.

No Image means that your TV is not receiving any transmission. Have you pressed the correct buttons on the remote control? Try once more.

PC Picture

If no PC picture appears, check that the D-SUB cable is connected properly. Check that your PC's resolution set correctly. See **pages 43** for supported modes.

Sound

You can not hear any sound. Did you perhaps interrupt the sound, pressing "🔇" button? Are external speakers connected to the TV?

Sound is coming from only one of the speakers. Is the balance set to one direction extreme? See **Sound** menu.

Remote Control

If your TV no longer responds to the remote control, perhaps the batteries are exhausted. Replace the batteries.

Have you selected the wrong menu? Press "**MENU**" button to return to normal screen or press "**BACK**" button to return to the previous menu.

No solution

If the TV suddenly stops responding, disconnect the power cord of the TV from the AC outlet. Connect themto the AC outlet again to turn on the TV. If the TV returns to a normal state, it is not a failure. If this does not work, switch off, remove the mains plug and call the service personnel; never attempt to repair it yourself.

Bad picture (in digital mode)

Although this TV can receive both Digital terrestrial broadcasting (DVB-T) and Analogue terrestrial broadcasting, you may not be able to receive DVB-T depending on the area in which you live.

If the picture freezes a lot, or block effect is seen frequently on screen, probably there is a problem with your reception.

Please contact customer services of your service provider if you are a subscriber.

Specifications

Item / Model	LT-20DA6SK
Broadcasting Systems	PAL BG, DK, I, L, Lp
Channels and Frequencies	Digital : 474 MHz - 858 MHz Analogue : 46.25 MHz - 862.25 MHz Cable TV (S1-S20/ S21-S41)
Input Signal	**Video:** Analog 0,7 Vp-p 75 ohm positive **Sync:** TTL Level positive or negative, Seperate sync.
Horizontal Timing	30 - 69 kHz
Vertical Timing	50 - 75 khz
Dot Rate	78,75 MHz max.
Panel Size	20,04" (509 mm) (measured diagonally)
Visible Picture Size	443,61 mm horizontal x 249,41 mm vertical
Display Resolution	1366 x 768 max. (WXGA)
Number of Preset Channels	Analogue: 100
Channel Indicator	On Screen Display (OSD)
RF Aerial Output	75 Ohm (unbalanced)
Power Requirements	**Adaptor:** 100-240 V AC, 50 Hz / **TV:** 24 V DC
Power Consumption (W)	80 W (max) / STAND-BY <3W
Sound Systems	German , Nicam Stereo
Audio Output	2 x 5 $W_{RMS.}$ (%10 THD)
EXT-1 Terminal	Euroconnector (21-pin, SCART) (bottom of the TV) • Video Input, Audio L/R Inputs and RGB inputs are available. • TV broadcast outputs (Video and Audio L/R) are available.
EXT-2 Terminal	Euroconnector (21-pin, SCART) (bottom of the TV) • Video Input, S-VIDEO (Y/C) input, Audio L/R and RGB inputs are available. • Video and Audio L/R outputs are available. • T-V LINK functions are available.
EXT-3 Terminal	RCA connectors x 5 (bottom of the cabinet) • Component video (Pr, Pb, Y) inputs and Audio L-R inputs are available • 625p/50Hz and 525p/60Hz signals are available.
EXT-4 Terminal	RCA connectors x 3 (side of the cabinet) S-VIDEO connector x 1 (side of the cabinet) • Video input, S-VIDEO (Y/C) input and Audio L/R inputs are available.
AUDIO OUT Terminal	RCA connectors x 3 • Audio L/R output are available. • Subwoofer out is available.
PC IN terminal	Analog RGB D-SUB 15 x 1 • PC signal is available (refer to **page 43** for details of the signals which can be input)
PC AUDIO IN terminal	Stereo mini-jack (3.5 mm diameter)
Card Slot	Card Slot for the Conditional Access Module (CAM) x1
Dimensions (W x H x D)	537 mm x 414 mm x 214 mm 537 mm x 377 mm x 97 mm (TV only)
Weight	6,5 kg (with stand) / 5,5 kg (TV only)
Accessories	Remote control unit x 1 (RM-C1895) / AA/R6 dry cell battery x 2 AC adapter x 1 / Power cord x 1
Headphone jack	Stereo mini-jack (3.5 mm diameter)
Wall Mount VESA Compatible	Yes. Wall Mount Hole Pitch:100mm×100mm (4 holes)

JVC

50076128

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0205MKH-VT-VT

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS	
CR	Carbon Resistor
FR	Fusible Resistor
PR	Plate Resistor
VR	Variable Resistor
HV R	High Voltage Resistor
MF R	Metal Film Resistor
MG R	Metal Glazed Resistor
MP R	Metal Plate Resistor
OM R	Metal Oxide Film Resistor
CMF R	Coating Metal Film Resistor
UNF R	Non-Flammable Resistor
CH V R	Chip Variable Resistor
CH MG R	Chip Metal Glazed Resistor
COMP. R	Composition Resistor
LPTC R	Linear Positive Temperature Coefficient Resistor

CAPACITORS	
C CAP.	Ceramic Capacitor
E CAP.	Electrolytic Capacitor
M CAP.	Mylar Capacitor
CH CAP.	Chip Capacitor
HV CAP.	High Voltage Capacitor
MF CAP.	Metalized Film Capacitor
MM CAP.	Metalized Mylar Capacitor
MP CAP.	Metalized Polystyrol Capacitor
PP CAP.	Polypropylene Capacitor
PS CAP.	Polystyrol Capacitor
TF CAP.	Thin Film Capacitor
MPP CAP.	Metalized Polypropylene Capacitor
TAN. CAP.	Tantalum Capacitor
CH C CAP.	Chip Ceramic Capacitor
BP E CAP.	Bi-Polar Electrolytic Capacitor
CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

RESISTORS									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

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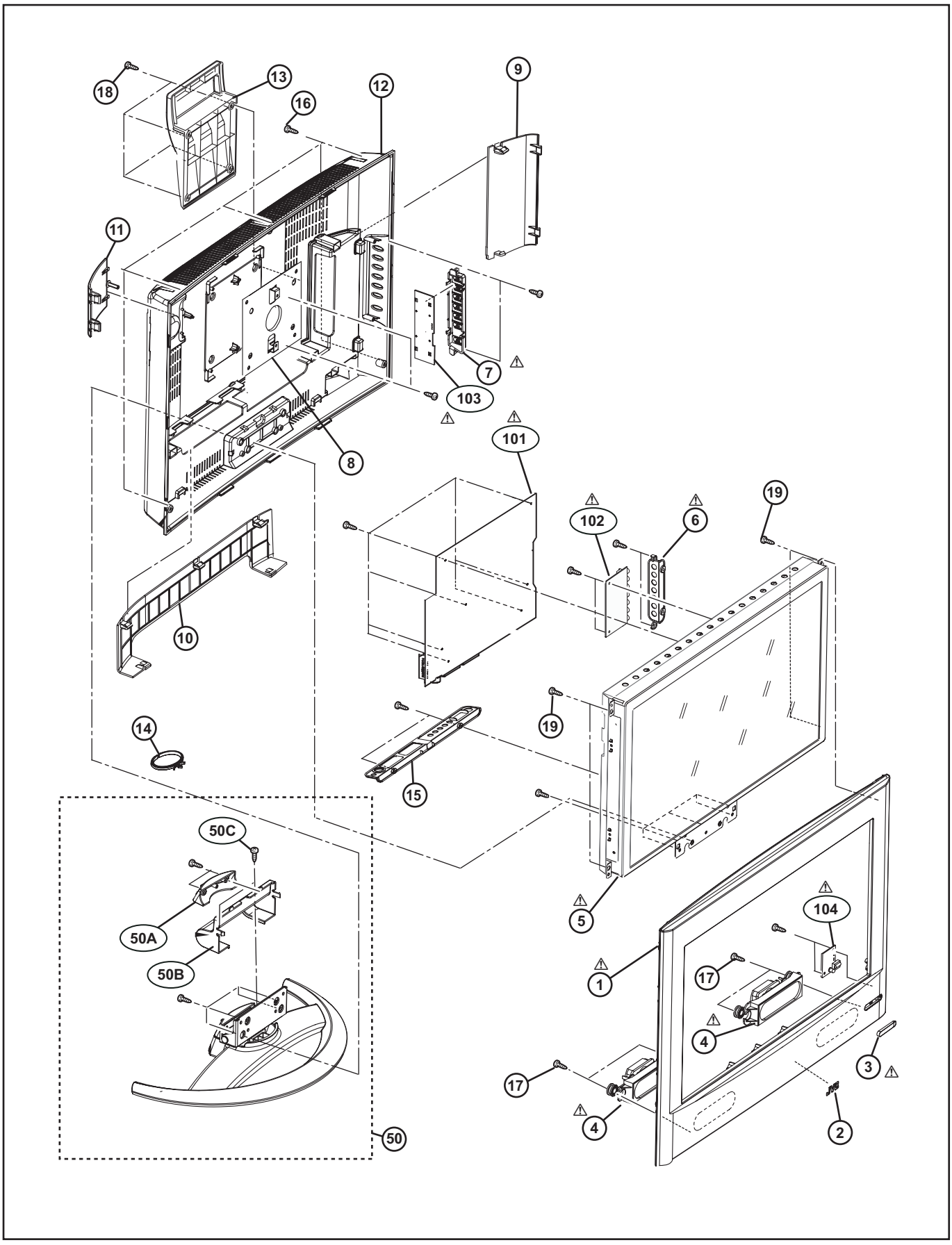
USING P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y name	P.W.B ASS'Y No.
	LT-20DA6SK
MAIN P.W.B	VE-20228287
AV JACK P.W.B	VE-20224823
SIDE CONTROL P.W.B	VE-20224821
LED P.W.B	VE-20220627
REMOTE CONTROL UNIT	VE-30034033

EXPLODED VIEW PARTS LIST -1

⚠	Ref.No.	Part No.	Part Name	Description	Local
⚠	1	VE-20224798	FRONT COVER		
	2	VE-20181267	LOGO JVC		
⚠	3	VE-20235770	LENS		
⚠	4	VE-30030145	SPEAKER	8Ω 10W 2x5cm(x2)	
⚠	5	VE-30041596	LCD PANEL UNIT		
⚠	6	VE-20224813	AV JACK BRACKET		
⚠	7	VE-20224812	BUTTON FUNCTION		
	8	VE-35012930	METAL HANG		
	9	VE-20224814	SIDE AV COVER		
	10	VE-20224816	BACK DOOR		
	11	VE-20224815	CARD SLOT COVER		
	12	VE-20224825	BACK COVER		
	13	VE-20182430	HANDLE		
	14	VE-20176416	CABLE HOLDER		
	15	VE-20224816	TERMINAL BOARD		
	16	VE-35000186	SCREW	(M3X8)For BACK COVER(x5)	
	17	VE-35008812	SCREW	(M3X10)For SPEAKER(x4)	
	18	VE-35005051	SCREW	(M4X16)For HANDLE(x4)	
	19	VE-35003339	SCREW	(M4X12)For LCD PANEL UNIT(x4)	
	50	VE-20224793	FOOT ASSEMBLY		
	50A	VE-20224795	HINGE COVER		
	50B	VE-20224794	FOOT TOP COVER		
	50C	VE-35008191	SCREW	(M3X12) For FOOT TOP COVER(x2)	
⚠	101	VE-20228287	MAIN PWB		
⚠	102	VE-20224823	AV JACK PWB		
⚠	103	VE-20224821	SIDE CONTROL PWB		
⚠	104	VE-20220627	LED PWB		

EXPLODED VIEW -1



PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (VE-20228287)

⚠Ref No.	Part No.	Part Name	Description Local
IC100	VE-30020865	IC	
IC101	VE-30032066	IC	
IC102	VE-30018006	IC	
IC104	VE-30019132	IC	
IC105	VE-30034805	IC	
IC106	VE-30017956	IC	
IC107	VE-30019372	IC	
IC108	VE-30027533	IC	
IC300	VE-LT-20DA6SK	IC	(SERVICE)
IC301	VE-30013571	IC	
IC302	VE-20227534	IC	(SERVICE)
IC305	VE-30010689	DIODE	
IC306	VE-30010689	DIODE	
IC400	VE-30015059	IC	
IC402	VE-30004999	IC	
IC403	VE-30019372	IC	
IC500	VE-30021083	IC	
IC600	VE-30013686	IC	
IC700	VE-30018263	IC	
IC701	VE-30010024	IC	
IC702	VE-30027663	IC	
IC705	VE-30001285	DIODE	
IC706	VE-30024945	IC	
IC708	VE-30031906	IC	
IC800	VE-30040058	IC	
IC901	VE-30027613	IC	
IC904	VE-30027612	IC	
IC906	VE-30018326	IC	
IC907	VE-30027635	IC	
IC908	VE-30014344	TRANSISTOR	
IC910	VE-30007739	IC	
IC911	VE-30030067	IC	
IC912	VE-30018574	DIODE	
IC913	VE-30018574	DIODE	
IC914	VE-30018574	DIODE	
IC915	VE-30018574	DIODE	
IC1005	VE-30017001	IC	
IC1100	VE-30016427	IC	
IC1101	VE-30010817	IC	
IC1102	VE-30010780	IC	
IC1103	VE-30007366	IC	
IC1201	VE-30012800	IC	
IC1300	VE-30014088	IC	
IC1301	VE-30014088	IC	
IC1302	VE-30014162	IC	
IC1303	VE-30010056	IC	
IC1402	VE-30020607	IC	
IC1403	VE-30020849	IC	
IC1600	VE-30014343	IC	
IC1601	VE-30017473	IC	
IC1602	VE-30017473	IC	
IC1603	VE-30017472	IC	
Q100	VE-30001457	TRANSISTOR	
Q101	VE-30018060	TRANSISTOR	
Q103	VE-30001457	TRANSISTOR	
Q104	VE-30001457	TRANSISTOR	
Q105	VE-30001457	TRANSISTOR	
Q300	VE-30001458	TRANSISTOR	
Q301	VE-30001457	TRANSISTOR	
Q302	VE-30001457	TRANSISTOR	
Q303	VE-30001457	TRANSISTOR	
Q304	VE-30001457	TRANSISTOR	
Q305	VE-30001457	TRANSISTOR	
Q306	VE-30001457	TRANSISTOR	
Q307	VE-30001457	TRANSISTOR	
Q308	VE-30001458	TRANSISTOR	
Q309	VE-30001457	TRANSISTOR	
Q311	VE-30001423	TRANSISTOR	
Q313	VE-30001457	TRANSISTOR	
Q314	VE-30001457	TRANSISTOR	
Q315	VE-30001457	TRANSISTOR	
Q316	VE-30001457	TRANSISTOR	
Q317	VE-30001457	TRANSISTOR	
Q318	VE-30001457	TRANSISTOR	
Q400	VE-30001457	TRANSISTOR	
Q501	VE-30001457	TRANSISTOR	
Q502	VE-30001457	TRANSISTOR	
Q600	VE-30001457	TRANSISTOR	
Q601	VE-30001457	TRANSISTOR	
Q602	VE-30001457	TRANSISTOR	
Q603	VE-30001457	TRANSISTOR	
Q700	VE-30001458	TRANSISTOR	
Q701	VE-30001457	TRANSISTOR	
Q702	VE-30001457	TRANSISTOR	
Q703	VE-30001457	TRANSISTOR	
Q704	VE-30001457	TRANSISTOR	
Q708	VE-30001458	TRANSISTOR	
Q709	VE-30001457	TRANSISTOR	
Q900	VE-30001457	TRANSISTOR	
Q901	VE-30001457	TRANSISTOR	
Q902	VE-30001454	TRANSISTOR	
Q903	VE-30001457	TRANSISTOR	
Q904	VE-30007798	TRANSISTOR	
Q905	VE-30007798	TRANSISTOR	
Q1120	VE-30001457	TRANSISTOR	
Q1121	VE-30001457	TRANSISTOR	
Q1206	VE-30012551	TRANSISTOR	
Q1207	VE-30012552	TRANSISTOR	
Q1400	VE-30016424	TRANSISTOR	
Q1401	VE-30016424	TRANSISTOR	
Q1402	VE-30016424	TRANSISTOR	
Q1403	VE-30001457	TRANSISTOR	
Q1600	VE-30001457	TRANSISTOR	
D100	VE-30001285	DIODE	
D101	VE-30001285	DIODE	
D103	VE-30007169	DIODE	
D105	VE-30007169	DIODE	
D107	VE-30007169	DIODE	
D108	VE-30025773	Z DIODE	
D109	VE-30025773	Z DIODE	
D110	VE-30001285	DIODE	
D111	VE-30001285	DIODE	
D112	VE-30001285	DIODE	
D113	VE-30001285	DIODE	
D114	VE-30001285	DIODE	
D115	VE-30001285	DIODE	
D116	VE-30007169	DIODE	
D117	VE-30007169	DIODE	
D118	VE-30007169	DIODE	
D119	VE-30007169	DIODE	
D120	VE-30038475	Z DIODE	
D1X1	VE-30025773	Z DIODE	
D300	VE-30038493	Z DIODE	
D301	VE-30001285	DIODE	
D302	VE-30001285	DIODE	
D305	VE-30001285	DIODE	
D306	VE-30001285	DIODE	
D307	VE-30001285	DIODE	
D500	VE-30001285	DIODE	
D501	VE-30039051	DIODE	
D600	VE-30038475	Z DIODE	
D700	VE-30038479	Z DIODE	
D701	VE-30001285	DIODE	
D702	VE-30001285	DIODE	
D703	VE-30001285	DIODE	
D704	VE-30038475	Z DIODE	
D705	VE-30038475	Z DIODE	
D706	VE-30038475	Z DIODE	
D707	VE-30038475	Z DIODE	
D708	VE-30038475	Z DIODE	
D709	VE-30038475	Z DIODE	
D711	VE-30025773	Z DIODE	
D712	VE-30025773	Z DIODE	
D714	VE-30025773	Z DIODE	
D715	VE-30038475	Z DIODE	
D716	VE-30025773	Z DIODE	
D717	VE-30025773	Z DIODE	
D719	VE-30001285	DIODE	
D720	VE-30038475	Z DIODE	
D721	VE-30025773	Z DIODE	
D722	VE-30025773	Z DIODE	
D723	VE-30025773	Z DIODE	
D724	VE-30018574	DIODE	
D725	VE-30038475	Z DIODE	
D726	VE-30038475	Z DIODE	
D902	VE-30001285	DIODE	
D903	VE-30001343	Z DIODE	
D905	VE-30001285	DIODE	
D1100	VE-30010689	DIODE	
D1101	VE-30010689	DIODE	
D1400	VE-30016425	DIODE	
C100	VE-30012566	CAPACITOR	22pF 50V J
C101	VE-30012566	CAPACITOR	22pF 50V J
C102	VE-30016654	CAPACITOR	100nF 16V K
C104	VE-30016654	CAPACITOR	100nF 16V K
C105	VE-30016654	CAPACITOR	100nF 16V K
C106	VE-30016654	CAPACITOR	100nF 16V K
C107	VE-30016654	CAPACITOR	100nF 16V K
C108	VE-30012582	CAPACITOR	10nF 50V K

⚠Ref No.	Part No.	Part Name	Description	Local
C109	VE-30012582	CAPACITOR	10nF 50V K	
C110	VE-30012582	CAPACITOR	10nF 50V K	
C111	VE-30012582	CAPACITOR	10nF 50V K	
C112	VE-30016654	CAPACITOR	100nF 16V K	
C113	VE-30012582	CAPACITOR	10nF 50V K	
C114	VE-30016654	CAPACITOR	100nF 16V K	
C115	VE-30000371	E CAPACITOR	22uF 50V M	
C116	VE-30016654	CAPACITOR	100nF 16V K	
C117	VE-30016654	CAPACITOR	100nF 16V K	
C118	VE-30016654	CAPACITOR	100nF 16V K	
C120	VE-30016654	CAPACITOR	100nF 16V K	
C121	VE-30016654	CAPACITOR	100nF 16V K	
C122	VE-30016654	CAPACITOR	100nF 16V K	
C123	VE-30016654	CAPACITOR	100nF 16V K	
C124	VE-30016654	CAPACITOR	100nF 16V K	
C125	VE-30016654	CAPACITOR	100nF 16V K	
C126	VE-30016654	CAPACITOR	100nF 16V K	
C127	VE-30016654	CAPACITOR	100nF 16V K	
C128	VE-30016654	CAPACITOR	100nF 16V K	
C129	VE-30016654	CAPACITOR	100nF 16V K	
C130	VE-30016654	CAPACITOR	100nF 16V K	
C131	VE-30016654	CAPACITOR	100nF 16V K	
C132	VE-30012581	CAPACITOR	1nF 50V K	
C133	VE-30012589	CAPACITOR	4.7nF 50V K	
C134	VE-30012589	CAPACITOR	4.7nF 50V K	
C136	VE-30016654	CAPACITOR	100nF 16V K	
C137	VE-30016654	CAPACITOR	100nF 16V K	
C138	VE-30000371	E CAPACITOR	22uF 50V M	
C139	VE-30000371	E CAPACITOR	22uF 50V M	
C143	VE-30016654	CAPACITOR	100nF 16V K	
C146	VE-30000109	CAPACITOR	470nF 63V J	
C147	VE-30016654	CAPACITOR	100nF 16V K	
C148	VE-30012575	CAPACITOR	4.7pF 50V C	
C149	VE-30012575	CAPACITOR	4.7pF 50V C	
C150	VE-30016654	CAPACITOR	100nF 16V K	
C151	VE-30016654	CAPACITOR	100nF 16V K	
C152	VE-30016654	CAPACITOR	100nF 16V K	
C153	VE-30012567	CAPACITOR	220pF 50V J	
C154	VE-30012567	CAPACITOR	220pF 50V J	
C155	VE-30012567	CAPACITOR	220pF 50V J	
C156	VE-30000371	E CAPACITOR	22uF 50V M	
C157	VE-30016654	CAPACITOR	100nF 16V K	
C158	VE-30012567	CAPACITOR	220pF 50V J	
C159	VE-30016654	CAPACITOR	100nF 16V K	
C160	VE-30012567	CAPACITOR	220pF 50V J	
C161	VE-30012567	CAPACITOR	220pF 50V J	
C162	VE-30000371	E CAPACITOR	22uF 50V M	
C163	VE-30016654	CAPACITOR	100nF 16V K	
C164	VE-30012567	CAPACITOR	220pF 50V J	
C165	VE-30016654	CAPACITOR	100nF 16V K	
C166	VE-30012567	CAPACITOR	220pF 50V J	
C167	VE-30016654	CAPACITOR	100nF 16V K	
C168	VE-30016654	CAPACITOR	100nF 16V K	
C169	VE-30012567	CAPACITOR	220pF 50V J	
C170	VE-30012567	CAPACITOR	220pF 50V J	
C171	VE-30016654	CAPACITOR	100nF 16V K	
C172	VE-30012567	CAPACITOR	220pF 50V J	
C174	VE-30016654	CAPACITOR	100nF 16V K	
C175	VE-30012567	CAPACITOR	220pF 50V J	
C176	VE-30016654	CAPACITOR	100nF 16V K	
C177	VE-30000371	E CAPACITOR	22uF 50V M	
C178	VE-30016654	CAPACITOR	100nF 16V K	
C183	VE-30016654	CAPACITOR	100nF 16V K	
C185	VE-30000352	E CAPACITOR	100uF 16V M	
C187	VE-30012576	CAPACITOR	56pF 50V J	
C189	VE-30016654	CAPACITOR	100nF 16V K	
C190	VE-30016654	CAPACITOR	100nF 16V K	
C191	VE-30016654	CAPACITOR	100nF 16V K	
C192	VE-30016654	CAPACITOR	100nF 16V K	
C193	VE-30000375	E CAPACITOR	220uF 16V M	
C217	VE-30012581	CAPACITOR	1nF 50V K	
C225	VE-30016126	CAPACITOR	220nF 16V K	
C300	VE-30000352	E CAPACITOR	100uF 16V M	
C301	VE-30016654	CAPACITOR	100nF 16V K	
C302	VE-30000371	E CAPACITOR	22uF 50V M	
C303	VE-30016654	CAPACITOR	100nF 16V K	
C304	VE-30016654	CAPACITOR	100nF 16V K	
C305	VE-30000371	E CAPACITOR	22uF 50V M	
C306	VE-30016654	CAPACITOR	100nF 16V K	
C307	VE-30016654	CAPACITOR	100nF 16V K	
C308	VE-30000371	E CAPACITOR	22uF 50V M	
C309	VE-30016654	CAPACITOR	100nF 16V K	
C310	VE-30016654	CAPACITOR	100nF 16V K	
C311	VE-30016654	CAPACITOR	100nF 16V K	
C312	VE-30016654	CAPACITOR	100nF 16V K	
C313	VE-30016654	CAPACITOR	100nF 16V K	
C314	VE-30000109	CAPACITOR	470nF 63V J	
C315	VE-30016654	CAPACITOR	100nF 16V K	
C316	VE-30000352	E CAPACITOR	100uF 16V M	
C317	VE-30012569	CAPACITOR	33pF 50V J	
C318	VE-30012569	CAPACITOR	33pF 50V J	
C319	VE-30000371	E CAPACITOR	22uF 50V M	
C320	VE-30016654	CAPACITOR	100nF 16V K	
C321	VE-30016654	CAPACITOR	100nF 16V K	
C324	VE-30000371	E CAPACITOR	22uF 50V M	
C325	VE-30012607	CAPACITOR	150pF 50V J	
C326	VE-30012569	CAPACITOR	33pF 50V J	
C327	VE-30016654	CAPACITOR	100nF 16V K	
C328	VE-30000352	E CAPACITOR	100uF 16V M	
C334	VE-30000354	E CAPACITOR	100uF 35V M	
C336	VE-30012560	CAPACITOR	100pF 50V J	
C337	VE-30016654	CAPACITOR	100nF 16V K	
C343	VE-30012560	CAPACITOR	100pF 50V J	
C344	VE-30012560	CAPACITOR	100pF 50V J	
C345	VE-30012560	CAPACITOR	100pF 50V J	
C346	VE-30000294	CAPACITOR	100nF 50V K	
C400	VE-30016654	CAPACITOR	100nF 16V K	
C401	VE-30012581	CAPACITOR	1nF 50V K	
C402	VE-30016654	CAPACITOR	100nF 16V K	
C403	VE-30016654	CAPACITOR	100nF 16V K	
C404	VE-30012613	CAPACITOR	3.3pF 50V C	
C405	VE-30012613	CAPACITOR	3.3pF 50V C	
C406	VE-30000315	CAPACITOR	220nF 25V Z	
C407	VE-30012581	CAPACITOR	1nF 50V K	
C408	VE-30012572	CAPACITOR	390pF 50V J	
C409	VE-30000345	E CAPACITOR	10uF 50V M	
C410	VE-30016654	CAPACITOR	100nF 16V K	
C411	VE-30000068	CAPACITOR	1nF 63V K	
C412	VE-30007082	CAPACITOR	680nF 63V J	
C413	VE-30007082	CAPACITOR	680nF 63V J	
C414	VE-30012582	CAPACITOR	10nF 50V K	
C415	VE-30000345	E CAPACITOR	10uF 50V M	
C416	VE-30012590	CAPACITOR	47nF 50V K	
C420	VE-30000294	CAPACITOR	100nF 50V K	
C421	VE-30000294	CAPACITOR	100nF 50V K	
C422	VE-30000294	CAPACITOR	100nF 50V K	
C424	VE-30016654	CAPACITOR	100nF 16V K	
C425	VE-30000315	CAPACITOR	220nF 25V Z	
C426	VE-30012581	CAPACITOR	1nF 50V K	
C427	VE-30012572	CAPACITOR	390pF 50V J	
C428	VE-30016654	CAPACITOR	100nF 16V K	
C429	VE-30012581	CAPACITOR	1nF 50V K	
C430	VE-30016654	CAPACITOR	100nF 16V K	
C431	VE-30000315	CAPACITOR	220nF 25V Z	
C432	VE-30000315	CAPACITOR	220nF 25V Z	
C433	VE-30000315	CAPACITOR	220nF 25V Z	
C434	VE-30012567	CAPACITOR	220pF 50V J	
C435	VE-30012567	CAPACITOR	220pF 50V J	
C436	VE-30012567	CAPACITOR	220pF 50V J	
C437	VE-30007082	CAPACITOR	680nF 63V J	
C438	VE-30000371	E CAPACITOR	22uF 50V M	
C439	VE-30016654	CAPACITOR	100nF 16V K	
C440	VE-30000352	E CAPACITOR	100uF 16V M	
C441	VE-30016654	CAPACITOR	100nF 16V K	
C442	VE-30012569	CAPACITOR	33pF 50V J	
C443	VE-30016654	CAPACITOR	100nF 16V K	
C485	VE-30016654	CAPACITOR	100nF 16V K	
C486	VE-30016654	CAPACITOR	100nF 16V K	
C487	VE-30016654	CAPACITOR	100nF 16V K	
C488	VE-30016654	CAPACITOR	100nF 16V K	
C489	VE-30016654	CAPACITOR	100nF 16V K	
C490	VE-30016654	CAPACITOR	100nF 16V K	
C491	VE-30016654	CAPACITOR	100nF 16V K	
C492	VE-30000345	E CAPACITOR	10uF 50V M	
C493	VE-30000294	CAPACITOR	100nF 50V K	
C494	VE-30012574	CAPACITOR	470pF 50V J	
C495	VE-30012574	CAPACITOR	470pF 50V J	
C502	VE-30016654	CAPACITOR	100nF 16V K	
C503	VE-30000345	E CAPACITOR	10uF 50V M	
C504	VE-30000407	E CAPACITOR	470uF 16V M	
C505	VE-30000400	E CAPACITOR	47uF 50V M	
C506	VE-30012582	CAPACITOR	10nF 50V K	
C507	VE-30012572	CAPACITOR	390pF 50V J	
C508	VE-30000109	CAPACITOR	470nF 63V J	
C509	VE-30012582	CAPACITOR	10nF 50V K	
C510	VE-30012566	CAPACITOR	22pF 50V J	
C511	VE-30000109	CAPACITOR	470nF 63V J	
C512	VE-30016654	CAPACITOR	100nF 16V K	
C513	VE-30012581	CAPACITOR	1nF 50V K	
C514	VE-30012582	CAPACITOR	10nF 50V K	
C515	VE-30016654	CAPACITOR	100nF 16V K	
C517	VE-30012569	CAPACITOR	33pF 50V J	
C519	VE-30016654	CAPACITOR	100nF 16V K	
C520	VE-30012582	CAPACITOR	10nF 50V K	
C522	VE-30000315	CAPACITOR	220nF 25V Z	
C523	VE-30000371	E CAPACITOR	22uF 50V M	
C524	VE-30016654	CAPACITOR	100nF 16V K	
C525	VE-30016654	CAPACITOR	100nF 16V K	
C526	VE-30000345	E CAPACITOR	10uF 50V M	
C600	VE-30000352	E CAPACITOR	100uF 16V M	

⚠Ref No.	Part No.	Part Name	Description Local
C601	VE-30000074	CAPACITOR	100nF 63V J
C602	VE-30000074	CAPACITOR	100nF 63V J
C603	VE-30000074	CAPACITOR	100nF 63V J
C604	VE-30016654	CAPACITOR	100nF 16V K
C605	VE-30016654	CAPACITOR	100nF 16V K
C606	VE-30000074	CAPACITOR	100nF 63V J
C607	VE-30012569	CAPACITOR	33pF 50V J
C608	VE-30016654	CAPACITOR	100nF 16V K
C609	VE-30016654	CAPACITOR	100nF 16V K
C610	VE-30016654	CAPACITOR	100nF 16V K
C611	VE-30016654	CAPACITOR	100nF 16V K
C613	VE-30016654	CAPACITOR	100nF 16V K
C614	VE-30016654	CAPACITOR	100nF 16V K
C615	VE-30012569	CAPACITOR	33pF 50V J
C616	VE-30000074	CAPACITOR	100nF 63V J
C700	VE-30016654	CAPACITOR	100nF 16V K
C701	VE-30012581	CAPACITOR	1nF 50V K
C702	VE-30000352	E CAPACITOR	100uF 16V M
C703	VE-30012581	CAPACITOR	1nF 50V K
C704	VE-30012589	CAPACITOR	4.7nF 50V K
C705	VE-30012589	CAPACITOR	4.7nF 50V K
C706	VE-30012589	CAPACITOR	4.7nF 50V K
C707	VE-30012589	CAPACITOR	4.7nF 50V K
C708	VE-30016654	CAPACITOR	100nF 16V K
C709	VE-30016126	CAPACITOR	220nF 16V K
C710	VE-30016126	CAPACITOR	220nF 16V K
C711	VE-30016126	CAPACITOR	220nF 16V K
C712	VE-30016126	CAPACITOR	220nF 16V K
C713	VE-30012579	CAPACITOR	82pF 50V J
C714	VE-30016654	CAPACITOR	100nF 16V K
C715	VE-30000393	E CAPACITOR	3.3uF 50V M
C716	VE-30000345	E CAPACITOR	10uF 50V M
C717	VE-30000345	E CAPACITOR	10uF 50V M
C718	VE-30000345	E CAPACITOR	10uF 50V M
C719	VE-30012581	CAPACITOR	1nF 50V K
C720	VE-30012581	CAPACITOR	1nF 50V K
C721	VE-30012565	CAPACITOR	1.8pF 50V J
C722	VE-30012565	CAPACITOR	1.8pF 50V J
C723	VE-30012581	CAPACITOR	1nF 50V K
C724	VE-30012581	CAPACITOR	1nF 50V K
C725	VE-30012581	CAPACITOR	1nF 50V K
C726	VE-30012579	CAPACITOR	82pF 50V J
C727	VE-30016654	CAPACITOR	100nF 16V K
C728	VE-30016654	CAPACITOR	100nF 16V K
C729	VE-30012581	CAPACITOR	1nF 50V K
C730	VE-30012581	CAPACITOR	1nF 50V K
C731	VE-30012607	CAPACITOR	150pF 50V J
C732	VE-30016126	CAPACITOR	220nF 16V K
C733	VE-30016126	CAPACITOR	220nF 16V K
C734	VE-30016654	CAPACITOR	100nF 16V K
C735	VE-30012581	CAPACITOR	1nF 50V K
C736	VE-30000352	E CAPACITOR	100uF 16V M
C737	VE-30012589	CAPACITOR	4.7nF 50V K
C738	VE-30000352	E CAPACITOR	100uF 16V M
C739	VE-30000400	E CAPACITOR	47uF 50V M
C740	VE-30012581	CAPACITOR	1nF 50V K
C741	VE-30012589	CAPACITOR	4.7nF 50V K
C742	VE-30000371	E CAPACITOR	22uF 50V M
C743	VE-30000371	E CAPACITOR	22uF 50V M
C744	VE-30000371	E CAPACITOR	22uF 50V M
C745	VE-30000371	E CAPACITOR	22uF 50V M
C746	VE-30012567	CAPACITOR	220pF 50V J
C747	VE-30012574	CAPACITOR	470pF 50V J
C748	VE-30012582	CAPACITOR	10nF 50V K
C749	VE-30016654	CAPACITOR	100nF 16V K
C750	VE-30012576	CAPACITOR	56pF 50V J
C751	VE-30000407	E CAPACITOR	470uF 16V M
C752	VE-30012581	CAPACITOR	1nF 50V K
C753	VE-30012581	CAPACITOR	1nF 50V K
C754	VE-30012574	CAPACITOR	470pF 50V J
C755	VE-30012574	CAPACITOR	470pF 50V J
C756	VE-30012581	CAPACITOR	1nF 50V K
C757	VE-30012581	CAPACITOR	1nF 50V K
C758	VE-30016126	CAPACITOR	220nF 16V K
C759	VE-30016126	CAPACITOR	220nF 16V K
C760	VE-30012581	CAPACITOR	1nF 50V K
C761	VE-30012581	CAPACITOR	1nF 50V K
C762	VE-30012589	CAPACITOR	4.7nF 50V K
C763	VE-30012589	CAPACITOR	4.7nF 50V K
C764	VE-30012589	CAPACITOR	4.7nF 50V K
C765	VE-30012589	CAPACITOR	4.7nF 50V K
C766	VE-30016654	CAPACITOR	100nF 16V K
C767	VE-30012607	CAPACITOR	150pF 50V J
C768	VE-30012607	CAPACITOR	150pF 50V J
C769	VE-30000371	E CAPACITOR	22uF 50V M
C770	VE-30000371	E CAPACITOR	22uF 50V M
C771	VE-30016126	CAPACITOR	220nF 16V K
C772	VE-30012581	CAPACITOR	1nF 50V K
C773	VE-30016126	CAPACITOR	220nF 16V K
C774	VE-30012581	CAPACITOR	1nF 50V K
C775	VE-30000345	E CAPACITOR	10uF 50V M
C776	VE-30010555	CAPACITOR	1uF 16V K
C777	VE-30000294	CAPACITOR	100nF 50V K
C778	VE-30000294	CAPACITOR	100nF 50V K
C779	VE-30012567	CAPACITOR	220pF 50V J
C780	VE-30012582	CAPACITOR	10nF 50V K
C781	VE-30012582	CAPACITOR	10nF 50V K
C782	VE-30000294	CAPACITOR	100nF 50V K
C783	VE-30000294	CAPACITOR	100nF 50V K
C784	VE-30000345	E CAPACITOR	10uF 50V M
C785	VE-30012581	CAPACITOR	1nF 50V K
C786	VE-30012581	CAPACITOR	1nF 50V K
C787	VE-30020694	CAPACITOR	1uF 16V Z
C788	VE-30020694	CAPACITOR	1uF 16V Z
C789	VE-30020694	CAPACITOR	1uF 16V Z
C790	VE-30020694	CAPACITOR	1uF 16V Z
C791	VE-30020694	CAPACITOR	1uF 16V Z
C792	VE-30010555	CAPACITOR	1uF 16V K
C793	VE-30012582	CAPACITOR	10nF 50V K
C794	VE-30012582	CAPACITOR	10nF 50V K
C795	VE-30012581	CAPACITOR	1nF 50V K
C796	VE-30012581	CAPACITOR	1nF 50V K
C797	VE-30000294	CAPACITOR	100nF 50V K
C798	VE-30012567	CAPACITOR	220pF 50V J
C799	VE-30012568	CAPACITOR	270pF 50V J
C808	VE-30012574	CAPACITOR	470pF 50V J
C809	VE-30012574	CAPACITOR	470pF 50V J
C810	VE-30012582	CAPACITOR	10nF 50V K
C811	VE-30016654	CAPACITOR	100nF 16V K
C812	VE-30016654	CAPACITOR	100nF 16V K
C813	VE-30012582	CAPACITOR	10nF 50V K
C814	VE-30016654	CAPACITOR	100nF 16V K
C815	VE-30012582	CAPACITOR	10nF 50V K
C816	VE-30012582	CAPACITOR	10nF 50V K
C817	VE-30016654	CAPACITOR	100nF 16V K
C818	VE-30012576	CAPACITOR	56pF 50V J
C823	VE-30016654	CAPACITOR	100nF 16V K
C827	VE-30012574	CAPACITOR	470pF 50V J
C828	VE-30012574	CAPACITOR	470pF 50V J
C829	VE-30012574	CAPACITOR	470pF 50V J
C830	VE-30012574	CAPACITOR	470pF 50V J
C831	VE-30012574	CAPACITOR	470pF 50V J
C832	VE-30020694	CAPACITOR	1uF 16V Z
C833	VE-30020694	CAPACITOR	1uF 16V Z
C834	VE-30000371	E CAPACITOR	22uF 50V M
C835	VE-30016654	CAPACITOR	100nF 16V K
C836	VE-30016654	CAPACITOR	100nF 16V K
C846	VE-30000353	E CAPACITOR	100uF 25V M
C858	VE-30012569	CAPACITOR	33pF 50V J
C859	VE-30012569	CAPACITOR	33pF 50V J
C860	VE-30012569	CAPACITOR	33pF 50V J
C863	VE-30012581	CAPACITOR	1nF 50V K
C866	VE-30000345	E CAPACITOR	10uF 50V M
C867	VE-30016654	CAPACITOR	100nF 16V K
C868	VE-30012582	CAPACITOR	10nF 50V K
C900	VE-30000354	E CAPACITOR	100uF 35V M
C903	VE-30018901	E CAPACITOR	100uF 50V M
C908	VE-30005819	E CAPACITOR	1000uF 16V M
C909	VE-30016654	CAPACITOR	100nF 16V K
C910	VE-30018901	E CAPACITOR	100uF 50V M
C912	VE-30031826	E CAPACITOR	4700uF 6.3V M
C913	VE-30016654	CAPACITOR	100nF 16V K
C920	VE-30000354	E CAPACITOR	100uF 35V M
C922	VE-30000359	E CAPACITOR	1000uF 16V M
C923	VE-30016654	CAPACITOR	100nF 16V K
C924	VE-30012576	CAPACITOR	56pF 50V J
C925	VE-30012560	CAPACITOR	100pF 50V J
C926	VE-30000371	E CAPACITOR	22uF 50V M
C927	VE-30000294	CAPACITOR	100nF 50V K
C928	VE-30000345	E CAPACITOR	10uF 50V M
C929	VE-30000294	CAPACITOR	100nF 50V K
C930	VE-30024336	E CAPACITOR	22uF 50V
C932	VE-30000294	CAPACITOR	100nF 50V K
C933	VE-30000294	CAPACITOR	100nF 50V K
C934	VE-30005819	E CAPACITOR	1000uF 16V M
C935	VE-30016654	CAPACITOR	100nF 16V K
C936	VE-30016654	CAPACITOR	100nF 16V K
C937	VE-30000371	E CAPACITOR	22uF 50V M
C938	VE-30018901	E CAPACITOR	100uF 50V M
C940	VE-30000359	E CAPACITOR	1000uF 16V M
C941	VE-30016654	CAPACITOR	100nF 16V K
C942	VE-30000352	E CAPACITOR	100uF 16V M
C1025	VE-30020694	CAPACITOR	1uF 16V Z
C1041	VE-30000359	E CAPACITOR	1000uF 16V M
C1050	VE-30020694	CAPACITOR	1uF 16V Z
C1051	VE-30020694	CAPACITOR	1uF 16V Z
C1052	VE-30020694	CAPACITOR	1uF 16V Z
C1053	VE-30000359	E CAPACITOR	1000uF 16V M
C1101	VE-30010555	CAPACITOR	1uF 16V K
C1102	VE-30012582	CAPACITOR	10nF 50V K

⚠Ref No.	Part No.	Part Name	Description Local
C1103	VE-30000345	E CAPACITOR	10uF 50V M
C1104	VE-30012582	CAPACITOR	10nF 50V K
C1109	VE-30016654	CAPACITOR	100nF 16V K
C1110	VE-30012564	CAPACITOR	18pF 50V J
C1111	VE-30012564	CAPACITOR	18pF 50V J
C1112	VE-30016654	CAPACITOR	100nF 16V K
C1113	VE-30016654	CAPACITOR	100nF 16V K
C1114	VE-30016654	CAPACITOR	100nF 16V K
C1115	VE-30016654	CAPACITOR	100nF 16V K
C1116	VE-30016654	CAPACITOR	100nF 16V K
C1117	VE-30016654	CAPACITOR	100nF 16V K
C1118	VE-30016654	CAPACITOR	100nF 16V K
C1119	VE-30016654	CAPACITOR	100nF 16V K
C1120	VE-30000294	CAPACITOR	100nF 50V K
C1121	VE-30016654	CAPACITOR	100nF 16V K
C1122	VE-30012570	CAPACITOR	330pF 50V J
C1123	VE-30016654	CAPACITOR	100nF 16V K
C1124	VE-30016654	CAPACITOR	100nF 16V K
C1125	VE-30016654	CAPACITOR	100nF 16V K
C1126	VE-30016654	CAPACITOR	100nF 16V K
C1127	VE-30016654	CAPACITOR	100nF 16V K
C1128	VE-30016654	CAPACITOR	100nF 16V K
C1129	VE-30016654	CAPACITOR	100nF 16V K
C1130	VE-30016654	CAPACITOR	100nF 16V K
C1131	VE-30016654	CAPACITOR	100nF 16V K
C1132	VE-30000359	E CAPACITOR	1000uF 16V M
C1133	VE-30000352	E CAPACITOR	100uF 16V M
C1134	VE-30000352	E CAPACITOR	100uF 16V M
C1135	VE-30000345	E CAPACITOR	10uF 50V M
C1137	VE-30000345	E CAPACITOR	10uF 50V M
C1145	VE-30016654	CAPACITOR	100nF 16V K
C1146	VE-30016654	CAPACITOR	100nF 16V K
C1147	VE-30016654	CAPACITOR	100nF 16V K
C1148	VE-30016654	CAPACITOR	100nF 16V K
C1201	VE-30016654	CAPACITOR	100nF 16V K
C1204	VE-30000353	E CAPACITOR	100uF 25V M
C1211	VE-30000384	E CAPACITOR	2.2uF 50V M
C1212	VE-30000384	E CAPACITOR	2.2uF 50V M
C1218	VE-30012576	CAPACITOR	56pF 50V J
C1220	VE-30012576	CAPACITOR	56pF 50V J
C1221	VE-30012567	CAPACITOR	220pF 50V J
C1227	VE-30016654	CAPACITOR	100nF 16V K
C1235	VE-30016654	CAPACITOR	100nF 16V K
C1236	VE-30000352	E CAPACITOR	100uF 16V M
C1252	VE-30012581	CAPACITOR	1nF 50V K
C1253	VE-30012567	CAPACITOR	220pF 50V J
C1254	VE-30012567	CAPACITOR	220pF 50V J
C1255	VE-30012567	CAPACITOR	220pF 50V J
C1300	VE-30016654	CAPACITOR	100nF 16V K
C1301	VE-30016654	CAPACITOR	100nF 16V K
C1302	VE-30016654	CAPACITOR	100nF 16V K
C1303	VE-30016654	CAPACITOR	100nF 16V K
C1304	VE-30016654	CAPACITOR	100nF 16V K
C1305	VE-30016654	CAPACITOR	100nF 16V K
C1306	VE-30016654	CAPACITOR	100nF 16V K
C1307	VE-30016654	CAPACITOR	100nF 16V K
C1308	VE-30016654	CAPACITOR	100nF 16V K
C1309	VE-30016654	CAPACITOR	100nF 16V K
C1310	VE-30016654	CAPACITOR	100nF 16V K
C1311	VE-30016654	CAPACITOR	100nF 16V K
C1312	VE-30016654	CAPACITOR	100nF 16V K
C1313	VE-30016654	CAPACITOR	100nF 16V K
C1314	VE-30016654	CAPACITOR	100nF 16V K
C1315	VE-30016654	CAPACITOR	100nF 16V K
C1316	VE-30016654	CAPACITOR	100nF 16V K
C1401	VE-30000400	E CAPACITOR	47uF 50V M
C1402	VE-30016654	CAPACITOR	100nF 16V K
C1403	VE-30016654	CAPACITOR	100nF 16V K
C1404	VE-30012582	CAPACITOR	10nF 50V K
C1405	VE-30016654	CAPACITOR	100nF 16V K
C1406	VE-30016085	E CAPACITOR	10uF 63V
C1408	VE-30016654	CAPACITOR	100nF 16V K
C1409	VE-30012560	CAPACITOR	100pF 50V J
C1410	VE-30000352	E CAPACITOR	100uF 16V M
C1411	VE-30012582	CAPACITOR	10nF 50V K
C1412	VE-30000315	CAPACITOR	220nF 25V Z
C1414	VE-30012582	CAPACITOR	10nF 50V K
C1415	VE-30012582	CAPACITOR	10nF 50V K
C1416	VE-30016654	CAPACITOR	100nF 16V K
C1420	VE-30012582	CAPACITOR	10nF 50V K
C1422	VE-30016654	CAPACITOR	100nF 16V K
C1423	VE-30016654	CAPACITOR	100nF 16V K
C1424	VE-30016654	CAPACITOR	100nF 16V K
C1428	VE-30016654	CAPACITOR	100nF 16V K
C1429	VE-30012582	CAPACITOR	10nF 50V K
C1430	VE-30016654	CAPACITOR	100nF 16V K
C1433	VE-30012582	CAPACITOR	10nF 50V K
C1434	VE-30016654	CAPACITOR	100nF 16V K
C1435	VE-30012564	CAPACITOR	18pF 50V J
C1436	VE-30012559	CAPACITOR	10pF 50V D
C1437	VE-30016654	CAPACITOR	100nF 16V K
C1438	VE-30016654	CAPACITOR	100nF 16V K
C1439	VE-30016654	CAPACITOR	100nF 16V K
C1440	VE-30016654	CAPACITOR	100nF 16V K
C1445	VE-30012560	CAPACITOR	100pF 50V J
C1446	VE-30012560	CAPACITOR	100pF 50V J
C1451	VE-30016654	CAPACITOR	100nF 16V K
C1452	VE-30000352	E CAPACITOR	100uF 16V M
C1453	VE-30000352	E CAPACITOR	100uF 16V M
C1456	VE-30016654	CAPACITOR	100nF 16V K
C1457	VE-30016654	CAPACITOR	100nF 16V K
C1458	VE-30016654	CAPACITOR	100nF 16V K
C1460	VE-30012579	CAPACITOR	82pF 50V J
C1461	VE-30012579	CAPACITOR	82pF 50V J
C1462	VE-30012607	CAPACITOR	150pF 50V J
C1463	VE-30014180	CAPACITOR	180pF 50V J
C1464	VE-30012559	CAPACITOR	10pF 50V D
C1471	VE-30012565	CAPACITOR	1.8pF 50V J
C1472	VE-30000384	E CAPACITOR	2.2uF 50V M
C1473	VE-30012581	CAPACITOR	1nF 50V K
C1474	VE-30012581	CAPACITOR	1nF 50V K
C1475	VE-30000352	E CAPACITOR	100uF 16V M
C1476	VE-30000352	E CAPACITOR	100uF 16V M
C1477	VE-30016654	CAPACITOR	100nF 16V K
C1480	VE-30000294	CAPACITOR	100nF 50V K
C1481	VE-30000375	E CAPACITOR	220uF 16V M
C1484	VE-30000352	E CAPACITOR	100uF 16V M
C1485	VE-30000375	E CAPACITOR	220uF 16V M
C1486	VE-30000352	E CAPACITOR	100uF 16V M
C1487	VE-30016654	CAPACITOR	100nF 16V K
C1489	VE-30020694	CAPACITOR	1uF 16V Z
C1600	VE-30016654	CAPACITOR	100nF 16V K
C1601	VE-30016654	CAPACITOR	100nF 16V K
C1602	VE-30016654	CAPACITOR	100nF 16V K
C1603	VE-30016654	CAPACITOR	100nF 16V K
C1604	VE-30016654	CAPACITOR	100nF 16V K
C1605	VE-30016654	CAPACITOR	100nF 16V K
C1606	VE-30016654	CAPACITOR	100nF 16V K
C1607	VE-30016654	CAPACITOR	100nF 16V K
C1608	VE-30016654	CAPACITOR	100nF 16V K
C1609	VE-30016654	CAPACITOR	100nF 16V K
C1610	VE-30016654	CAPACITOR	100nF 16V K
C1800	VE-30000294	CAPACITOR	100nF 50V K
C1801	VE-30000294	CAPACITOR	100nF 50V K
C1802	VE-30000294	CAPACITOR	100nF 50V K
C1803	VE-30000345	E CAPACITOR	10uF 50V M
C1804	VE-30016654	CAPACITOR	100nF 16V K
C1805	VE-30012581	CAPACITOR	1nF 50V K
C1806	VE-30000355	E CAPACITOR	100uF 50V M
C1807	VE-30000352	E CAPACITOR	100uF 16V M
C1817	VE-30016126	CAPACITOR	220nF 16V K
C1818	VE-30016126	CAPACITOR	220nF 16V K
C1819	VE-30000352	E CAPACITOR	100uF 16V M
C1820	VE-30012574	CAPACITOR	470pF 50V J
C1821	VE-30012574	CAPACITOR	470pF 50V J
C1822	VE-30016126	CAPACITOR	220nF 16V K
C1823	VE-30016126	CAPACITOR	220nF 16V K
C1824	VE-30016126	CAPACITOR	220nF 16V K
C1825	VE-30016126	CAPACITOR	220nF 16V K
C1826	VE-30016126	CAPACITOR	220nF 16V K
C1827	VE-30016126	CAPACITOR	220nF 16V K
C1828	VE-30016126	CAPACITOR	220nF 16V K
C1829	VE-30016126	CAPACITOR	220nF 16V K
C1830	VE-30000371	E CAPACITOR	22uF 50V M
C1831	VE-30016654	CAPACITOR	100nF 16V K
C1832	VE-30016126	CAPACITOR	220nF 16V K
C1833	VE-30016126	CAPACITOR	220nF 16V K
C1834	VE-30000352	E CAPACITOR	100uF 16V M
C1835	VE-30000359	E CAPACITOR	1000uF 16V M
C1836	VE-30016126	CAPACITOR	220nF 16V K
C1837	VE-30016126	CAPACITOR	220nF 16V K
R100	VE-30012713	RESISTOR	1/16W 75R J
R101	VE-30012713	RESISTOR	1/16W 75R J
R102	VE-30012713	RESISTOR	1/16W 75R J
R103	VE-30012713	RESISTOR	1/16W 75R J
R104	VE-30012713	RESISTOR	1/16W 75R J
R105	VE-30012641	RESISTOR	1/16W 10K J
R106	VE-30012641	RESISTOR	1/16W 10K J
R107	VE-30012510	RESISTOR	1/16W 100R J
R108	VE-30012510	RESISTOR	1/16W 100R J
R109	VE-30012692	RESISTOR	1/16W 4.7K J
R110	VE-30012692	RESISTOR	1/16W 4.7K J
R111	VE-30012510	RESISTOR	1/16W 100R J
R121	VE-30012679	RESISTOR	1/16W 3.9K J
R122	VE-30012510	RESISTOR	1/16W 100R J
R123	VE-30012510	RESISTOR	1/16W 100R J
R127	VE-30012641	RESISTOR	1/16W 10K J
R128	VE-30012641	RESISTOR	1/16W 10K J
R136	VE-30012506	RESISTOR	1/16W 1.5K J

⚠Ref No.	Part No.	Part Name	Description Local
R137	VE-30012506	RESISTOR	1/16W 1.5K J
R138	VE-30012506	RESISTOR	1/16W 1.5K J
R139	VE-30012657	RESISTOR	1/16W 1K J
R141	VE-30012641	RESISTOR	1/16W 10K J
R142	VE-30012657	RESISTOR	1/16W 1K J
R143	VE-30012657	RESISTOR	1/16W 1K J
R145	VE-30012510	RESISTOR	1/16W 100R J
R146	VE-30012510	RESISTOR	1/16W 100R J
R147	VE-30012510	RESISTOR	1/16W 100R J
R148	VE-30012510	RESISTOR	1/16W 100R J
R149	VE-30012641	RESISTOR	1/16W 10K J
R150	VE-30012657	RESISTOR	1/16W 1K J
R151	VE-30012657	RESISTOR	1/16W 1K J
R152	VE-30012655	RESISTOR	1/16W 180R J
R153	VE-30012641	RESISTOR	1/16W 10K J
R154	VE-30012641	RESISTOR	1/16W 10K J
R155	VE-30012641	RESISTOR	1/16W 10K J
R156	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J
R157	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J
R158	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J
R159	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J
R160	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J
R161	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J
R162	VE-30012509	RESISTOR	1/16W 100K J
R165	VE-30025836	FERRITE NET	240R/100MHz 150mA
R166	VE-30025836	FERRITE NET	240R/100MHz 150mA
R168	VE-30012641	RESISTOR	1/16W 10K J
R169	VE-30012641	RESISTOR	1/16W 10K J
R170	VE-30012641	RESISTOR	1/16W 10K J
R172	VE-30012641	RESISTOR	1/16W 10K J
R173	VE-30012641	RESISTOR	1/16W 10K J
R174	VE-30012641	RESISTOR	1/16W 10K J
R175	VE-30012641	RESISTOR	1/16W 10K J
R176	VE-30012641	RESISTOR	1/16W 10K J
R177	VE-30012641	RESISTOR	1/16W 10K J
R178	VE-30012641	RESISTOR	1/16W 10K J
R179	VE-30012641	RESISTOR	1/16W 10K J
R180	VE-30012641	RESISTOR	1/16W 10K J
R181	VE-30012641	RESISTOR	1/16W 10K J
R182	VE-30012641	RESISTOR	1/16W 10K J
R183	VE-30012657	RESISTOR	1/16W 1K J
R184	VE-30012657	RESISTOR	1/16W 1K J
R185	VE-30012641	RESISTOR	1/16W 10K J
R189	VE-30012657	RESISTOR	1/16W 1K J
R193	VE-30012657	RESISTOR	1/16W 1K J
R199	VE-30012641	RESISTOR	1/16W 10K J
R300	VE-30012657	RESISTOR	1/16W 1K J
R301	VE-30018409	RESISTOR ARRAY	1/16W 330R J
R302	VE-30018409	RESISTOR ARRAY	1/16W 330R J
R303	VE-30018409	RESISTOR ARRAY	1/16W 330R J
R304	VE-30018409	RESISTOR ARRAY	1/16W 330R J
R305	VE-30018409	RESISTOR ARRAY	1/16W 330R J
R306	VE-30018409	RESISTOR ARRAY	1/16W 330R J
R307	VE-30018409	RESISTOR ARRAY	1/16W 330R J
R308	VE-30012657	RESISTOR	1/16W 1K J
R309	VE-30012669	RESISTOR	1/16W 22K J
R310	VE-30012510	RESISTOR	1/16W 100R J
R311	VE-30012510	RESISTOR	1/16W 100R J
R312	VE-30012510	RESISTOR	1/16W 100R J
R313	VE-30012705	RESISTOR	1/16W 6.8K J
R314	VE-30012705	RESISTOR	1/16W 6.8K J
R315	VE-30012692	RESISTOR	1/16W 4.7K J
R316	VE-30012679	RESISTOR	1/16W 3.9K J
R317	VE-30016230	RESISTOR	1/16W 16K F
R318	VE-30012659	RESISTOR	1/16W 2.2K J
R319	VE-30012692	RESISTOR	1/16W 4.7K J
R320	VE-30012659	RESISTOR	1/16W 2.2K J
R321	VE-30012692	RESISTOR	1/16W 4.7K J
R322	VE-30012695	RESISTOR	1/16W 470R J
R323	VE-30012987	RESISTOR	1/16W 56R J
R324	VE-30012692	RESISTOR	1/16W 4.7K J
R325	VE-30012695	RESISTOR	1/16W 470R J
R326	VE-30012695	RESISTOR	1/16W 470R J
R327	VE-30012695	RESISTOR	1/16W 470R J
R328	VE-30012685	RESISTOR	1/16W 33K J
R329	VE-30012685	RESISTOR	1/16W 33K J
R330	VE-30012685	RESISTOR	1/16W 33K J
R331	VE-30012685	RESISTOR	1/16W 33K J
R332	VE-30012510	RESISTOR	1/16W 100R J
R333	VE-30012510	RESISTOR	1/16W 100R J
R334	VE-30012692	RESISTOR	1/16W 4.7K J
R335	VE-30012692	RESISTOR	1/16W 4.7K J
R336	VE-30012692	RESISTOR	1/16W 4.7K J
R337	VE-30012692	RESISTOR	1/16W 4.7K J
R339	VE-30012642	RESISTOR	1/16W 120K J
R340	VE-30012692	RESISTOR	1/16W 4.7K J
R341	VE-30012644	RESISTOR	1/16W 12K J
R342	VE-30012668	RESISTOR	1/16W 220R J
R343	VE-30012668	RESISTOR	1/16W 220R J
R344	VE-30012657	RESISTOR	1/16W 1K J
R345	VE-30012669	RESISTOR	1/16W 22K J
R346	VE-30012657	RESISTOR	1/16W 1K J
R347	VE-30014022	RESISTOR	1/16W 47R J
R348	VE-30012655	RESISTOR	1/16W 180R J
R349	VE-30014022	RESISTOR	1/16W 47R J
R350	VE-30012692	RESISTOR	1/16W 4.7K J
R353	VE-30012641	RESISTOR	1/16W 10K J
R354	VE-30012692	RESISTOR	1/16W 4.7K J
R355	VE-30012659	RESISTOR	1/16W 2.2K J
R357	VE-30012692	RESISTOR	1/16W 4.7K J
R358	VE-30012695	RESISTOR	1/16W 470R J
R359	VE-30012659	RESISTOR	1/16W 2.2K J
R360	VE-30012506	RESISTOR	1/16W 1.5K J
R361	VE-30012657	RESISTOR	1/16W 1K J
R367	VE-30012692	RESISTOR	1/16W 4.7K J
R368	VE-30012692	RESISTOR	1/16W 4.7K J
R369	VE-30012692	RESISTOR	1/16W 4.7K J
R372	VE-30012692	RESISTOR	1/16W 4.7K J
R373	VE-30012692	RESISTOR	1/16W 4.7K J
R374	VE-30012692	RESISTOR	1/16W 4.7K J
R375	VE-30012684	RESISTOR	1/16W 330R J
R376	VE-30012692	RESISTOR	1/16W 4.7K J
R379	VE-30012684	RESISTOR	1/16W 330R J
R380	VE-30012669	RESISTOR	1/16W 22K J
R381	VE-30012657	RESISTOR	1/16W 1K J
R383	VE-30016230	RESISTOR	1/16W 16K F
R384	VE-30012679	RESISTOR	1/16W 3.9K J
R385	VE-30012692	RESISTOR	1/16W 4.7K J
R386	VE-30012506	RESISTOR	1/16W 1.5K J
R387	VE-30012506	RESISTOR	1/16W 1.5K J
R388	VE-30012641	RESISTOR	1/16W 10K J
R389	VE-30012641	RESISTOR	1/16W 10K J
R390	VE-30012692	RESISTOR	1/16W 4.7K J
R391	VE-30012696	RESISTOR	1/16W 47K J
R392	VE-30012696	RESISTOR	1/16W 47K J
R393	VE-30012510	RESISTOR	1/16W 100R J
R394	VE-30012641	RESISTOR	1/16W 10K J
R395	VE-30012684	RESISTOR	1/16W 330R J
R396	VE-30012684	RESISTOR	1/16W 330R J
R397	VE-30012692	RESISTOR	1/16W 4.7K J
R399	VE-30012692	RESISTOR	1/16W 4.7K J
R400	VE-30012713	RESISTOR	1/16W 75R J
R401	VE-30012713	RESISTOR	1/16W 75R J
R402	VE-30012713	RESISTOR	1/16W 75R J
R404	VE-30012713	RESISTOR	1/16W 75R J
R405	VE-30012713	RESISTOR	1/16W 75R J
R406	VE-30012713	RESISTOR	1/16W 75R J
R407	VE-30012510	RESISTOR	1/16W 100R J
R408	VE-30012510	RESISTOR	1/16W 100R J
R409	VE-30012713	RESISTOR	1/16W 75R J
R410	VE-30012644	RESISTOR	1/16W 12K J
R411	VE-30012669	RESISTOR	1/16W 22K J
R412	VE-30014022	RESISTOR	1/16W 47R J
R413	VE-30012657	RESISTOR	1/16W 1K J
R414	VE-30012713	RESISTOR	1/16W 75R J
R415	VE-30012510	RESISTOR	1/16W 100R J
R416	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J
R417	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J
R425	VE-30012695	RESISTOR	1/16W 470R J
R426	VE-30012695	RESISTOR	1/16W 470R J
R427	VE-30012695	RESISTOR	1/16W 470R J
R431	VE-30012657	RESISTOR	1/16W 1K J
R432	VE-30012657	RESISTOR	1/16W 1K J
R434	VE-30012657	RESISTOR	1/16W 1K J
R437	VE-30012713	RESISTOR	1/16W 75R J
R438	VE-30012713	RESISTOR	1/16W 75R J
R439	VE-30012713	RESISTOR	1/16W 75R J
R450	VE-30012509	RESISTOR	1/16W 100K J
R451	VE-30012657	RESISTOR	1/16W 1K J
R452	VE-30012669	RESISTOR	1/16W 22K J
R453	VE-30012509	RESISTOR	1/16W 100K J
R454	VE-30012509	RESISTOR	1/16W 100K J
R459	VE-30012510	RESISTOR	1/16W 100R J
R460	VE-30012510	RESISTOR	1/16W 100R J
R503	VE-30012510	RESISTOR	1/16W 100R J
R504	VE-30012510	RESISTOR	1/16W 100R J
R505	VE-30012510	RESISTOR	1/16W 100R J
R506	VE-30012510	RESISTOR	1/16W 100R J
R507	VE-30012698	RESISTOR	1/16W 5.6K J
R508	VE-30012510	RESISTOR	1/16W 100R J
R509	VE-30012641	RESISTOR	1/16W 10K J
R510	VE-30012644	RESISTOR	1/16W 12K J
R511	VE-30012696	RESISTOR	1/16W 47K J
R512	VE-30012684	RESISTOR	1/16W 330R J
R513	VE-30012713	RESISTOR	1/16W 75R J
R514	VE-30012669	RESISTOR	1/16W 22K J
R515	VE-30012669	RESISTOR	1/16W 22K J
R516	VE-30012657	RESISTOR	1/16W 1K J

⚠Ref No.	Part No.	Part Name	Description	Local
R517	VE-30012659	RESISTOR	1/16W 2.2K J	
R518	VE-30012510	RESISTOR	1/16W 100R J	
R522	VE-30012641	RESISTOR	1/16W 10K J	
R523	VE-30012659	RESISTOR	1/16W 2.2K J	
R524	VE-30012510	RESISTOR	1/16W 100R J	
R525	VE-30012702	RESISTOR	1/16W 560R J	
R527	VE-30012692	RESISTOR	1/16W 4.7K J	
R529	VE-30012982	RESISTOR	1/16W 10R J	
R530	VE-30014022	RESISTOR	1/16W 47R J	
R531	VE-30012692	RESISTOR	1/16W 4.7K J	
R600	VE-30012713	RESISTOR	1/16W 75R J	
R601	VE-30012713	RESISTOR	1/16W 75R J	
R602	VE-30012510	RESISTOR	1/16W 100R J	
R603	VE-30012510	RESISTOR	1/16W 100R J	
R604	VE-30012982	RESISTOR	1/16W 10R J	
R605	VE-30012695	RESISTOR	1/16W 470R J	
R606	VE-30012641	RESISTOR	1/16W 10K J	
R607	VE-30012692	RESISTOR	1/16W 4.7K J	
R608	VE-30012713	RESISTOR	1/16W 75R J	
R609	VE-30012982	RESISTOR	1/16W 10R J	
R610	VE-30012695	RESISTOR	1/16W 470R J	
R611	VE-30012641	RESISTOR	1/16W 10K J	
R612	VE-30012692	RESISTOR	1/16W 4.7K J	
R613	VE-30012713	RESISTOR	1/16W 75R J	
R614	VE-30012713	RESISTOR	1/16W 75R J	
R615	VE-30012713	RESISTOR	1/16W 75R J	
R617	VE-30012713	RESISTOR	1/16W 75R J	
R618	VE-30012982	RESISTOR	1/16W 10R J	
R619	VE-30012695	RESISTOR	1/16W 470R J	
R620	VE-30012641	RESISTOR	1/16W 10K J	
R621	VE-30012692	RESISTOR	1/16W 4.7K J	
R622	VE-30012713	RESISTOR	1/16W 75R J	
R623	VE-30012713	RESISTOR	1/16W 75R J	
R625	VE-30012982	RESISTOR	1/16W 10R J	
R626	VE-30012695	RESISTOR	1/16W 470R J	
R627	VE-30012641	RESISTOR	1/16W 10K J	
R628	VE-30012692	RESISTOR	1/16W 4.7K J	
R629	VE-30012713	RESISTOR	1/16W 75R J	
R630	VE-30012713	RESISTOR	1/16W 75R J	
R631	VE-30012713	RESISTOR	1/16W 75R J	
R632	VE-30000797	RESISTOR	1/10W 75R J	
R633	VE-30000797	RESISTOR	1/10W 75R J	
R634	VE-30012509	RESISTOR	1/16W 100K J	
R635	VE-30012509	RESISTOR	1/16W 100K J	
R636	VE-30012509	RESISTOR	1/16W 100K J	
R637	VE-30012509	RESISTOR	1/16W 100K J	
R700	VE-30012641	RESISTOR	1/16W 10K J	
R701	VE-30012641	RESISTOR	1/16W 10K J	
R702	VE-30012510	RESISTOR	1/16W 100R J	
R703	VE-30012510	RESISTOR	1/16W 100R J	
R704	VE-30012692	RESISTOR	1/16W 4.7K J	
R705	VE-30012712	RESISTOR	1/16W 8.2K J	
R706	VE-30012641	RESISTOR	1/16W 10K J	
R707	VE-30012712	RESISTOR	1/16W 8.2K J	
R708	VE-30012669	RESISTOR	1/16W 22K J	
R709	VE-30012669	RESISTOR	1/16W 22K J	
R710	VE-30012641	RESISTOR	1/16W 10K J	
R711	VE-30012510	RESISTOR	1/16W 100R J	
R712	VE-30012657	RESISTOR	1/16W 1K J	
R713	VE-30012657	RESISTOR	1/16W 1K J	
R714	VE-30012702	RESISTOR	1/16W 560R J	
R715	VE-30012702	RESISTOR	1/16W 560R J	
R716	VE-30012702	RESISTOR	1/16W 560R J	
R717	VE-30012702	RESISTOR	1/16W 560R J	
R720	VE-30023426	FIXED COIL	1.2uH K	
R721	VE-30023426	FIXED COIL	1.2uH K	
R722	VE-30023426	FIXED COIL	1.2uH K	
R723	VE-30012713	RESISTOR	1/16W 75R J	
R724	VE-30012713	RESISTOR	1/16W 75R J	
R725	VE-30012713	RESISTOR	1/16W 75R J	
R726	VE-30012657	RESISTOR	1/16W 1K J	
R727	VE-30012657	RESISTOR	1/16W 1K J	
R728	VE-30023426	FIXED COIL	1.2uH K	
R729	VE-30012713	RESISTOR	1/16W 75R J	
R730	VE-30023426	FIXED COIL	1.2uH K	
R731	VE-30012713	RESISTOR	1/16W 75R J	
R732	VE-30012713	RESISTOR	1/16W 75R J	
R733	VE-30023426	FIXED COIL	1.2uH K	
R734	VE-30012510	RESISTOR	1/16W 100R J	
R735	VE-30012510	RESISTOR	1/16W 100R J	
R736	VE-30012657	RESISTOR	1/16W 1K J	
R737	VE-30012657	RESISTOR	1/16W 1K J	
R738	VE-30012657	RESISTOR	1/16W 1K J	
R739	VE-30012657	RESISTOR	1/16W 1K J	
R740	VE-30012657	RESISTOR	1/16W 1K J	
R741	VE-30012657	RESISTOR	1/16W 1K J	
R742	VE-30012642	RESISTOR	1/16W 120K J	
R743	VE-30012644	RESISTOR	1/16W 12K J	
R744	VE-30012696	RESISTOR	1/16W 47K J	
R745	VE-30012685	RESISTOR	1/16W 33K J	
R746	VE-30012674	RESISTOR	1/16W 27K J	
R747	VE-30012641	RESISTOR	1/16W 10K J	
R748	VE-30012713	RESISTOR	1/16W 75R J	
R749	VE-30012668	RESISTOR	1/16W 220R J	
R750	VE-30012657	RESISTOR	1/16W 1K J	
R751	VE-30012510	RESISTOR	1/16W 100R J	
R752	VE-30012657	RESISTOR	1/16W 1K J	
R753	VE-30012641	RESISTOR	1/16W 10K J	
R761	VE-30000315	CAPACITOR	220nF 25V Z	
R762	VE-30012713	RESISTOR	1/16W 75R J	
R763	VE-30000469	RESISTOR	1/10W 1K J	
R764	VE-30012677	RESISTOR	1/16W 3.3K J	
R765	VE-30012641	RESISTOR	1/16W 10K J	
R766	VE-30012641	RESISTOR	1/16W 10K J	
R767	VE-30012641	RESISTOR	1/16W 10K J	
R768	VE-30012641	RESISTOR	1/16W 10K J	
R769	VE-30012641	RESISTOR	1/16W 10K J	
R770	VE-30012641	RESISTOR	1/16W 10K J	
R771	VE-30012641	RESISTOR	1/16W 10K J	
R778	VE-30012641	RESISTOR	1/16W 10K J	
R779	VE-30012509	RESISTOR	1/16W 100K J	
R780	VE-30012641	RESISTOR	1/16W 10K J	
R784	VE-30000315	CAPACITOR	220nF 25V Z	
R785	VE-30000315	CAPACITOR	220nF 25V Z	
R786	VE-30012713	RESISTOR	1/16W 75R J	
R787	VE-30012713	RESISTOR	1/16W 75R J	
R788	VE-30000469	RESISTOR	1/10W 1K J	
R789	VE-30012510	RESISTOR	1/16W 100R J	
R790	VE-30012510	RESISTOR	1/16W 100R J	
R791	VE-30012510	RESISTOR	1/16W 100R J	
R792	VE-30012510	RESISTOR	1/16W 100R J	
R793	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J	
R800	VE-30012692	RESISTOR	1/16W 4.7K J	
R802	VE-30026054	RESISTOR ARRAY	1/32W 47R J	
R803	VE-30026054	RESISTOR ARRAY	1/32W 47R J	
R804	VE-30026054	RESISTOR ARRAY	1/32W 47R J	
R805	VE-30026054	RESISTOR ARRAY	1/32W 47R J	
R806	VE-30026054	RESISTOR ARRAY	1/32W 47R J	
R807	VE-30026054	RESISTOR ARRAY	1/32W 47R J	
R808	VE-30020529	FERRITE	120R/100MHz 200mA	
R901	VE-30016230	RESISTOR	1/16W 16K F	
R902	VE-30012642	RESISTOR	1/16W 120K J	
R903	VE-30012641	RESISTOR	1/16W 10K J	
R904	VE-30016230	RESISTOR	1/16W 16K F	
R907	VE-30012510	RESISTOR	1/16W 100R J	
R908	VE-30012510	RESISTOR	1/16W 100R J	
R909	VE-30012677	RESISTOR	1/16W 3.3K J	
R910	VE-30020899	RESISTOR	1/16W 1R J	
R911	VE-30012713	RESISTOR	1/16W 75R J	
R912	VE-30012655	RESISTOR	1/16W 180R J	
R913	VE-30012679	RESISTOR	1/16W 3.9K J	
R915	VE-30012509	RESISTOR	1/16W 100K J	
R918	VE-30012677	RESISTOR	1/16W 3.3K J	
R919	VE-30012668	RESISTOR	1/16W 220R J	
R920	VE-30012657	RESISTOR	1/16W 1K J	
R921	VE-30012655	RESISTOR	1/16W 180R J	
R922	VE-30012641	RESISTOR	1/16W 10K J	
R923	VE-30012641	RESISTOR	1/16W 10K J	
R924	VE-30012641	RESISTOR	1/16W 10K J	
R925	VE-30012641	RESISTOR	1/16W 10K J	
R926	VE-30012668	RESISTOR	1/16W 220R J	
R927	VE-30012641	RESISTOR	1/16W 10K J	
R928	VE-30012641	RESISTOR	1/16W 10K J	
R931	VE-30013001	RESISTOR	1/16W 1K F	
R932	VE-30012987	RESISTOR	1/16W 56R J	
R933	VE-30013001	RESISTOR	1/16W 1K F	
R1059	VE-30012657	RESISTOR	1/16W 1K J	
R1100	VE-30012692	RESISTOR	1/16W 4.7K J	
R1101	VE-30012713	RESISTOR	1/16W 75R J	
R1102	VE-30012713	RESISTOR	1/16W 75R J	
R1103	VE-30012692	RESISTOR	1/16W 4.7K J	
R1104	VE-30012669	RESISTOR	1/16W 22K J	
R1105	VE-30014442	RESISTOR	1/16W 20K F	
R1106	VE-30012510	RESISTOR	1/16W 100R J	
R1108	VE-30012641	RESISTOR	1/16W 10K J	
R1110	VE-30012641	RESISTOR	1/16W 10K J	
R1112	VE-30012641	RESISTOR	1/16W 10K J	
R1113	VE-30012641	RESISTOR	1/16W 10K J	
R1114	VE-30012641	RESISTOR	1/16W 10K J	
R1115	VE-30012641	RESISTOR	1/16W 10K J	
R1118	VE-30012694	RESISTOR	1/16W 470K J	
R1119	VE-30012694	RESISTOR	1/16W 470K J	
R1120	VE-30012712	RESISTOR	1/16W 8.2K J	
R1121	VE-30012696	RESISTOR	1/16W 47K J	
R1122	VE-30012658	RESISTOR	1/16W 1M J	
R1123	VE-30012669	RESISTOR	1/16W 22K J	
R1125	VE-30012692	RESISTOR	1/16W 4.7K J	
R1126	VE-30012713	RESISTOR	1/16W 75R J	
R1127	VE-30014128	RESISTOR	1/16W 33R J	

⚠Ref No.	Part No.	Part Name	Description Local
R1128	VE-30012712	RESISTOR	1/16W 8.2K J
R1134	VE-30014128	RESISTOR	1/16W 33R J
R1135	VE-30014128	RESISTOR	1/16W 33R J
R1136	VE-30014128	RESISTOR	1/16W 33R J
R1137	VE-30012692	RESISTOR	1/16W 4.7K J
R1144	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1147	VE-30012713	RESISTOR	1/16W 75R J
R1148	VE-30014128	RESISTOR	1/16W 33R J
R1151	VE-30012659	RESISTOR	1/16W 2.2K J
R1152	VE-30012659	RESISTOR	1/16W 2.2K J
R1158	VE-30012713	RESISTOR	1/16W 75R J
R1159	VE-30012713	RESISTOR	1/16W 75R J
R1160	VE-30014128	RESISTOR	1/16W 33R J
R1161	VE-30014128	RESISTOR	1/16W 33R J
R1221	VE-30012667	RESISTOR	1/16W 220K J
R1222	VE-30012667	RESISTOR	1/16W 220K J
R1231	VE-30012702	RESISTOR	1/16W 560R J
R1232	VE-30012702	RESISTOR	1/16W 560R J
R1233	VE-30012692	RESISTOR	1/16W 4.7K J
R1235	VE-30012707	RESISTOR	1/16W 680R J
R1236	VE-30012695	RESISTOR	1/16W 470R J
R1237	VE-30012714	RESISTOR	1/16W 820R J
R1238	VE-30012713	RESISTOR	1/16W 75R J
R1239	VE-30012684	RESISTOR	1/16W 330R J
R1240	VE-30012684	RESISTOR	1/16W 330R J
R1300	VE-30014128	RESISTOR	1/16W 33R J
R1302	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1305	VE-30012641	RESISTOR	1/16W 10K J
R1306	VE-30014128	RESISTOR	1/16W 33R J
R1307	VE-30012713	RESISTOR	1/16W 75R J
R1308	VE-30012713	RESISTOR	1/16W 75R J
R1310	VE-30014128	RESISTOR	1/16W 33R J
R1311	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1312	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1318	VE-30012641	RESISTOR	1/16W 10K J
R1319	VE-30014022	RESISTOR	1/16W 47R J
R1336	VE-30014128	RESISTOR	1/16W 33R J
R1337	VE-30014128	RESISTOR	1/16W 33R J
R1338	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1339	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1400	VE-30012506	RESISTOR	1/16W 1.5K J
R1401	VE-30012659	RESISTOR	1/16W 2.2K J
R1402	VE-30012659	RESISTOR	1/16W 2.2K J
R1403	VE-30012982	RESISTOR	1/16W 10R J
R1404	VE-30012510	RESISTOR	1/16W 100R J
R1407	VE-30012982	RESISTOR	1/16W 10R J
R1408	VE-30012695	RESISTOR	1/16W 470R J
R1409	VE-30012641	RESISTOR	1/16W 10K J
R1410	VE-30012659	RESISTOR	1/16W 2.2K J
R1411	VE-30012659	RESISTOR	1/16W 2.2K J
R1413	VE-30014022	RESISTOR	1/16W 47R J
R1414	VE-30012982	RESISTOR	1/16W 10R J
R1415	VE-30012659	RESISTOR	1/16W 2.2K J
R1416	VE-30012659	RESISTOR	1/16W 2.2K J
R1417	VE-30014022	RESISTOR	1/16W 47R J
R1418	VE-30012692	RESISTOR	1/16W 4.7K J
R1419	VE-30012692	RESISTOR	1/16W 4.7K J
R1421	VE-30012657	RESISTOR	1/16W 1K J
R1428	VE-30012655	RESISTOR	1/16W 180R J
R1443	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1444	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1447	VE-30012713	RESISTOR	1/16W 75R J
R1448	VE-30012713	RESISTOR	1/16W 75R J
R1449	VE-30012655	RESISTOR	1/16W 180R J
R1451	VE-30012713	RESISTOR	1/16W 75R J
R1456	VE-30012982	RESISTOR	1/16W 10R J
R1463	VE-30014128	RESISTOR	1/16W 33R J
R1465	VE-30014022	RESISTOR	1/16W 47R J
R1466	VE-30014022	RESISTOR	1/16W 47R J
R1467	VE-30016230	RESISTOR	1/16W 16K F
R1468	VE-30020847	RESISTOR	1/16W 510K J
R1470	VE-30012696	RESISTOR	1/16W 47K J
R1600	VE-30012696	RESISTOR	1/16W 47K J
R1601	VE-30012692	RESISTOR	1/16W 4.7K J
R1602	VE-30012641	RESISTOR	1/16W 10K J
R1603	VE-30012641	RESISTOR	1/16W 10K J
R1604	VE-30012641	RESISTOR	1/16W 10K J
R1630	VE-30012641	RESISTOR	1/16W 10K J
R1631	VE-30012641	RESISTOR	1/16W 10K J
R1632	VE-30012641	RESISTOR	1/16W 10K J
R1649	VE-30014128	RESISTOR	1/16W 33R J
R1650	VE-30014128	RESISTOR	1/16W 33R J
R1651	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1652	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1653	VE-30014128	RESISTOR	1/16W 33R J
R1657	VE-30014128	RESISTOR	1/16W 33R J
R1658	VE-30014022	RESISTOR	1/16W 47R J
R1659	VE-30014022	RESISTOR	1/16W 47R J
R1739	VE-30012641	RESISTOR	1/16W 10K J
R1740	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1741	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1742	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1743	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1744	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1745	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1746	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R1747	VE-30026054	RESISTOR ARRAY	1/32W 47R J
R761X	VE-30000484	RESISTOR	1/10W 1M J
R784X	VE-30000484	RESISTOR	1/10W 1M J
R785X	VE-30000484	RESISTOR	1/10W 1M J
L101	VE-30001971	FERRITE	600R/100MHz 200mA
L103	VE-30002170	FERRITE CORE	1A
L104	VE-30001971	FERRITE	600R/100MHz 200mA
L105	VE-30001971	FERRITE	600R/100MHz 200mA
L109	VE-30001971	FERRITE	600R/100MHz 200mA
L110	VE-30001971	FERRITE	600R/100MHz 200mA
L113	VE-30000710	RESISTOR	1/10W 47R J
L300	VE-30017542	FIXED COIL	10uH J
L301	VE-30017542	FIXED COIL	10uH J
L302	VE-30017542	FIXED COIL	10uH J
L303	VE-30017542	FIXED COIL	10uH J
L305	VE-30001990	FIXED COIL	6.8uH K
L306	VE-30001971	FERRITE	600R/100MHz 200mA
L307	VE-30006712	FERRITE BEAD	
L401	VE-30001971	FERRITE	600R/100MHz 200mA
L402	VE-30001971	FERRITE	600R/100MHz 200mA
L408	VE-30001971	FERRITE	600R/100MHz 200mA
L409	VE-30017542	FIXED COIL	10uH J
L501	VE-30001971	FERRITE	600R/100MHz 200mA
L502	VE-30001971	FERRITE	600R/100MHz 200mA
L503	VE-30001971	FERRITE	600R/100MHz 200mA
L504	VE-30001996	FIXED COIL	22uH K
L600	VE-30017542	FIXED COIL	10uH J
L700	VE-30001971	FERRITE	600R/100MHz 200mA
L701	VE-30001971	FERRITE	600R/100MHz 200mA
L702	VE-30001971	FERRITE	600R/100MHz 200mA
L703	VE-30001971	FERRITE	600R/100MHz 200mA
L704	VE-30001971	FERRITE	600R/100MHz 200mA
L705	VE-30001971	FERRITE	600R/100MHz 200mA
L706	VE-30001971	FERRITE	600R/100MHz 200mA
L707	VE-30001971	FERRITE	600R/100MHz 200mA
L708	VE-30001971	FERRITE	600R/100MHz 200mA
L709	VE-30001971	FERRITE	600R/100MHz 200mA
L710	VE-30006712	FERRITE BEAD	
L711	VE-30001971	FERRITE	600R/100MHz 200mA
L712	VE-30001971	FERRITE	600R/100MHz 200mA
L713	VE-30001971	FERRITE	600R/100MHz 200mA
L714	VE-30001971	FERRITE	600R/100MHz 200mA
L715	VE-30001971	FERRITE	600R/100MHz 200mA
L716	VE-30001971	FERRITE	600R/100MHz 200mA
L717	VE-30001971	FERRITE	600R/100MHz 200mA
L718	VE-30024779	FERRITE	50R/100MHz 3A
L719	VE-30024779	FERRITE	50R/100MHz 3A
L721	VE-30024779	FERRITE	50R/100MHz 3A
L722	VE-30024779	FERRITE	50R/100MHz 3A
L723	VE-30001971	FERRITE	600R/100MHz 200mA
L724	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L725	VE-30013412	FERRITE	1.5K/100MHz 500 mA

⚠Ref No.	Part No.	Part Name	Description Local
L726	VE-30001971	FERRITE	600R/100MHz 200mA
L729	VE-30001971	FERRITE	600R/100MHz 200mA
L736	VE-30018093	FIXED COIL	3.3uH J
L739	VE-30017143	FIXED COIL	22uH J
L800	VE-30001971	FERRITE	600R/100MHz 200mA
L801	VE-30002170	FERRITE CORE	1A
L802	VE-30020394	FERRITE	330R/100MHz 3A
L804	VE-30020394	FERRITE	330R/100MHz 3A
L900	VE-30002170	FERRITE CORE	1A
L903	VE-30002170	FERRITE CORE	1A
L906	VE-30001996	FIXED COIL	22uH K
L907	VE-30002170	FERRITE CORE	1A
L910	VE-30002002	FIXED COIL	47uH K
L911	VE-30002170	FERRITE CORE	1A
L914	VE-30011450	FIXED COIL	22uH
L915	VE-30036233	FIXED COIL	47uH 2.8A
L916	VE-30036233	FIXED COIL	47uH 2.8A
L917	VE-30036233	FIXED COIL	47uH 2.8A
L918	VE-30036233	FIXED COIL	47uH 2.8A
L1007	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1008	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1009	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1010	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1011	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1012	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1013	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1014	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1015	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1016	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1017	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1102	VE-30017143	FIXED COIL	22uH J
L1103	VE-30017143	FIXED COIL	22uH J
L1106	VE-30001971	FERRITE	600R/100MHz 200mA
L1107	VE-30000710	RESISTOR	1/10W 47R J
L1108	VE-30001971	FERRITE	600R/100MHz 200mA
L1109	VE-30001971	FERRITE	600R/100MHz 200mA
L1111	VE-30001971	FERRITE	600R/100MHz 200mA
L1113	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1203	VE-30017143	FIXED COIL	22uH J
L1207	VE-30017143	FIXED COIL	22uH J
L1208	VE-30001968	FERRITE	200R/100MHz 200mA
L1209	VE-30001968	FERRITE	200R/100MHz 200mA
L1210	VE-30001968	FERRITE	200R/100MHz 200mA
L1211	VE-30001968	FERRITE	200R/100MHz 200mA
L1212	VE-30001968	FERRITE	200R/100MHz 200mA
L1213	VE-30001968	FERRITE	200R/100MHz 200mA
L1214	VE-30001968	FERRITE	200R/100MHz 200mA
L1215	VE-30001968	FERRITE	200R/100MHz 200mA
L1216	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1217	VE-30001968	FERRITE	200R/100MHz 200mA
L1219	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1220	VE-30017143	FIXED COIL	22uH J
L1221	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1222	VE-30013412	FERRITE	1.5K/100MHz 500 mA
L1400	VE-30016451	FIXED COIL	
L1404	VE-30017143	FIXED COIL	22uH J
L1405	VE-30011011	FIXED COIL	22uH J
L1413	VE-30001971	FERRITE	600R/100MHz 200mA
L1822	VE-30016659	COIL	1uH
L1823	VE-30017542	FIXED COIL	10uH J
L1824	VE-30017143	FIXED COIL	22uH J
L1825	VE-30018612	COIL	330nH
L1826	VE-30018612	COIL	330nH
L1827	VE-30016659	COIL	1uH
L1828	VE-30016659	COIL	1uH
⚠F900	VE-30035282	FUSE	5A/32VDC
⚠F901	VE-30028331	FUSE	7A/32VDC
JK700	VE-30001902	MINI JACK	PC AUDIO IN
JK702	VE-30032636	PIN JACK	EXT3-AUDIO IN(L)
JK703	VE-30032638	PIN JACK	EXT3-Pr IN
JK704	VE-30032638	PIN JACK	EXT3-AUDIO IN(R)
JK705	VE-30032233	PIN JACK	EXT3-Y IN
JK706	VE-30032234	PIN JACK	EXT3-Pb IN
JK901	VE-30027932	DC POWER SOCKET	DC 24V IN
PL101	VE-30033117	D SOCKET	D-SUB
PL700	VE-30018089	SOCET SCART	EXT-1
PL701	VE-30018089	SOCET SCART	EXT-2
PL1600	VE-30031603	SOCKET PCMCIA	
S700	VE-30001971	FERRITE	600R/100MHz 200mA
S701	VE-30001971	FERRITE	600R/100MHz 200mA
S1001	VE-30020394	FERRITE	330R/100MHz 3A
S1002	VE-30020394	FERRITE	330R/100MHz 3A
S1003	VE-30020394	FERRITE	330R/100MHz 3A
S1005	VE-30012982	RESISTOR	1/16W 10R J
S1006	VE-30020394	FERRITE	330R/100MHz 3A
S1007	VE-30020394	FERRITE	330R/100MHz 3A
TU500	VE-30020655	TUNER	
TU1400	VE-30021785	TUNER	
X100	VE-30017946	CLYSTAL	14.318MHZ
X300	VE-30006662	CLYSTAL	6.000MHz
X400	VE-30008778	CLYSTAL	20.250MHz
X500	VE-30021113	CLYSTAL	4MHZ
X700	VE-30001756	CLYSTAL	18.432MHz
X1100	VE-30007367	CLYSTAL	27MHz
X1400	VE-30033132	CLYSTAL	27MHz
Z500	VE-30001692	SAW FILTER	
Z501	VE-30012545	SAW FILTER	
Z1400	VE-30015953	SAW FILTER	

AV JACK PWB P.W. BOARD ASS'Y (VE-20224823)

⚠Ref No.	Part No.	Part Name	Description Local
D100	VE-30038475	Z DIODE	
D101	VE-30038475	Z DIODE	
D102	VE-30038475	Z DIODE	
D103	VE-30038475	Z DIODE	
D104	VE-30038475	Z DIODE	
D107	VE-30038475	Z DIODE	
D108	VE-30038475	Z DIODE	
D109	VE-30038475	Z DIODE	
C100	VE-30012569	CAPACITOR	33pF 50V J
C101	VE-30012569	CAPACITOR	33pF 50V J
C102	VE-30012569	CAPACITOR	33pF 50V J
C103	VE-30012560	CAPACITOR	100pF 50V J
C104	VE-30012560	CAPACITOR	100pF 50V J
C105	VE-30012560	CAPACITOR	100pF 50V J
C106	VE-30012589	CAPACITOR	4.7nF 50V K
C107	VE-30012589	CAPACITOR	4.7nF 50V K
C108	VE-30012560	CAPACITOR	100pF 50V J
C109	VE-30012560	CAPACITOR	100pF 50V J
C110	VE-30012560	CAPACITOR	100pF 50V J
R100	VE-30012695	RESISTOR	1/16W 470R J
R101	VE-30012695	RESISTOR	1/16W 470R J
R102	VE-30014128	RESISTOR	1/16W 33R J
R103	VE-30014128	RESISTOR	1/16W 33R J
R104	VE-30012695	RESISTOR	1/16W 470R J
R105	VE-30012695	RESISTOR	1/16W 470R J
R106	VE-30012695	RESISTOR	1/16W 470R J
R107	VE-30014078	RESISTOR	1/16W 22R J
R108	VE-30014078	RESISTOR	1/16W 22R J
L100	VE-30020393	FERRITE	600R/100MHz 200mA
L101	VE-30020393	FERRITE	600R/100MHz 200mA
L102	VE-30020393	FERRITE	600R/100MHz 200mA
L103	VE-30020393	FERRITE	600R/100MHz 200mA

⚠Ref No.	Part No.	Part Name	Description	Local
L104	VE-30020393	FERRITE	600R/100MHz 200mA	
L105	VE-30020393	FERRITE	600R/100MHz 200mA	
L106	VE-30020393	FERRITE	600R/100MHz 200mA	
L107	VE-30020393	FERRITE	600R/100MHz 200mA	
L108	VE-30020393	FERRITE	600R/100MHz 200mA	
L109	VE-30020393	FERRITE	600R/100MHz 200mA	
L110	VE-30020393	FERRITE	600R/100MHz 200mA	
L111	VE-30020393	FERRITE	600R/100MHz 200mA	
L112	VE-30020393	FERRITE	600R/100MHz 200mA	
L113	VE-30020393	FERRITE	600R/100MHz 200mA	
L114	VE-30020393	FERRITE	600R/100MHz 200mA	
L115	VE-30020393	FERRITE	600R/100MHz 200mA	
L116	VE-30020393	FERRITE	600R/100MHz 200mA	
L117	VE-30020393	FERRITE	600R/100MHz 200mA	
L118	VE-30020393	FERRITE	600R/100MHz 200mA	
L119	VE-30020393	FERRITE	600R/100MHz 200mA	
L120	VE-30020393	FERRITE	600R/100MHz 200mA	
JK100	VE-30032640	S JACK	EXT4-S-VIDEO IN	
JK101	VE-30032639	PIN JACK	EXT4-VIDEO IN	
JK102	VE-30032638	PIN JACK	EXT4-AUDIO IN(R)	
JK103	VE-30032636	PIN JACK	EXT4-AUDIO IN(L)	
JK104	VE-30031077	HEADPHONE JACK	HEADPHONE	
JK105	VE-30032636	PIN JACK	SUBWOOFER	
JK106	VE-30032636	PIN JACK	AUDIO OUT(L)	
JK107	VE-30032638	PIN JACK	AUDIO OUT(R)	

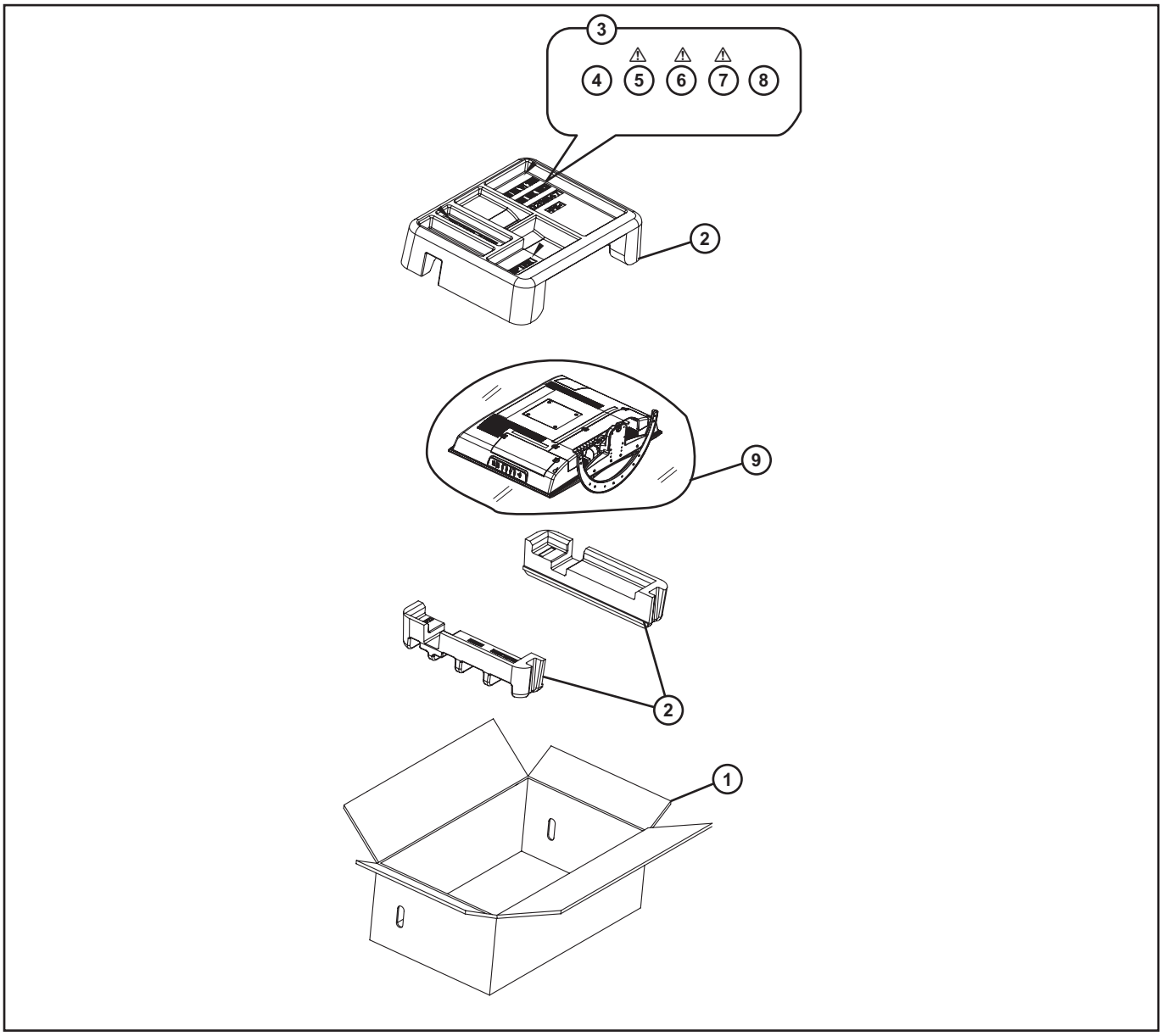
SIDE CONTROL P.W. BOARD ASS'Y (VE-20224821)

⚠Ref No.	Part No.	Part Name	Description	Local
R1	VE-30000689	RESISTOR	1/4W 3.9K J	
R2	VE-30000526	RESISTOR	1/4W 1.5K J	
R3	VE-30000770	RESISTOR	1/4W 680R J	
R4	VE-30000712	RESISTOR	1/4W 470R J	
R5	VE-30000623	RESISTOR	1/4W 270R G	
SW1	VE-30032684	TACT SWITCH	VOLUME -	
SW2	VE-30032684	TACT SWITCH	VOLUME +	
SW3	VE-30032684	TACT SWITCH	PROGRAM -	
SW4	VE-30032684	TACT SWITCH	PROGRAM +	
SW5	VE-30032684	TACT SWITCH	MENU/OK	
SW6	VE-30032684	TACT SWITCH	STAND-BY	
SW7	VE-30032684	TACT SWITCH	TV/AV	

LED P.W. BOARD ASS'Y (VE-20220627)

⚠Ref No.	Part No.	Part Name	Description	Local
IC1	VE-30019223	IC		
D1	VE-30019678	LED	RED/GREEN	
C1	VE-30000371	E CAPACITOR	22uF 50V M	
R1	VE-30000459	RESISTOR	1/4W 100R J	
R3	VE-30000792	RESISTOR	1/4W 75R J	

PACKING



PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
	1	VE-50076130	CARTON BOX		
	2	VE-20217803	CUSHION ASSEMBLY		
	3	VE-70000587	POLY BAG		
	4	VE-30034033	REMOTE CONTROL UNIT	RM-C1895	
⚠	5	VE-50076128	INSTRUCTION BOOK	(ENGLISH)	
⚠	6	VE-30002375	POWER CORD		
⚠	7	VE-30033122	ADAPTER	DC24V	
	8	----------	BATTERY	AA/R06(x2)	
	9	VE-50000007	POLY BAG		

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